

# Consequences of the deregulation of the taxi services.

Insights from consumers in the Oulu region.

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#### Abstract

In July 2018, Finland's Ministry for Transport and Communications liberated the Finnish taxi market. The objectives set for the reform were increasing services and jobs in the transport business, improving taxi service quality, availability and digitalization, increasing utilization, service demand and the number of taxi entrepreneurs and drivers as well as bringing savings with decreased taxi prices.

The aim for the research was to gain insight from consumers on the deregulation of the taxi services. As sub-questions, outcomes of the deregulation as well as customer values were researched. The focus of the study was on the Oulu region. The research context was Oulun Aluetaksi Oy that was used for comparing the results instantly to practise. The study had a qualitative research approach. The 7 P's framework for services (Booms and Bitner 1981) was applied as the main theoretical framework and used in the data analysis. The framework allowed to concentrate on the research objectives and to gain a deeper insight of the customer values and requirements. Nine interviewees were selected for the study.

According to the results, deregulation has caused fear among elderly people and uncertainty among others. Uncertain availability, lack of local knowledge, failed competitive tendering and decreased service quality were regarded as defects. The taxi fares had increased, and price comparison was seen difficult. The results suggest that taxi operators should concentrate on service quality, reliability and availability. A taxi driver has a significant effect on the customer experience. The customers value a safe, smooth and professional driving experience. Education was seen important, and the possible mistakes should be promptly handled for enabling a smooth service process and satisfied customers. Finally, proposals for changes as well as customer value propositions for different segments were presented.

Keywords/tags

Deregulation, taxi services, taxi business, market liberation, 7P's framework, Liikennekaari, Oulu

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#### Tiivistelmä

Suomen taksimarkkinat vapautettiin Liikenne- ja viestintäministeriön toimesta heinäkuussa 2018. Taksimarkkinauudistukselle asetettuja tavoitteita olivat kuljetusalan palvelujen ja työpaikkojen kasvattaminen, palvelun laadun, saatavuuden ja digitalisaation parantaminen, käyttöasteen, palvelutarpeen, taksiyrittäjien ja kuljettajien määrän kasvattaminen, sekä kustannussäästöt taksihintojen alenemisen ansiosta.

Tutkimuksen tavoitteena oli asiakasymmärryksen hankkiminen taksimarkkinoiden vapauttamisesta. Lisäksi tutkittiin vapauttamisen seurauksia asiakkaan näkökulmasta sekä asiakkaan arvostamia palveluominaisuuksia. Tutkimus keskittyi Oulun alueelle. Tutkimuksen kontekstina oli Oulun Aluetaksi Oy, jonka avulla tuloksia heijastettiin välittömästi käytäntöön. Tutkimus toteutettiin laadullisena tutkimuksena. 7P-palvelumallia hyödynnettiin teoreettisessa viitekehyksessä ja tutkimuksen analysoinnissa. 7P-palvelumalli mahdollisti keskittymisen tutkimuksen tavoitteisiin sekä syvällisemmän asiakasarvojen ja -vaatimusten asiakasymmärryksen saavuttamisen. Tutkimusta varten valittiin yhdeksän haastateltavaa.

Tutkimustulokset osoittivat, että markkinoiden vapauttaminen aiheutti pelkoa vanhusten keskellä, sekä epävarmuutta muiden keskuudessa. Epävarma saatavuus, paikallistuntemuksen puute, epäonnistunut kilpailutus ja heikentynyt palvelun laatu nähtiin epäkohtina. Taksipalvelun hinnat ovat nousseet, ja hintavertailua pidettiin vaikeana. Tutkimuksen perusteella esitettiin, että taksiyritysten tulisi keskittyä palvelun laatuun, luotettavuuteen ja saatavuuteen. Taksinkuljettajalla nähtiin olevan merkittävä vaikutus asiakaskokemukseen. Asiakas arvostaa turvallista, sujuvaa ja asiantuntevaa ajokokemusta. Koulutusta pidettiin tärkeänä. Mahdolliset virheet tulisi käsitellä viipymättä sujuvan palveluprosessin ja tyytyväisten asiakkaiden vuoksi. Lopuksi esiteltiin ehdotetut muutokset sekä eri asiakasryhmille suunnattavat arvolupaukset.

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Avu	mou	Iut

Taksipalvelu, taksilaki, taksimarkkinat, taksilakiuudistus, Liikennekaari, Oulu, 7P-malli

Muut tiedot

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## 1 Introduction

The taxi business has a long history, and in Finland the market has been regulated for long. The current phenomenon, where the taxi market is open for competition, is new for both the taxi operators, consumers as well as authorities. The thesis concentrates on the customer's side of the phenomenon by investigating the taxi market, its liberalisation as well as consumer's views on the changed market situation. Consumers' visions and expectations will formulate an important guideline for proceeding with future actions in the taxi business. The research will benefit both taxi operators, authorities as well as consumers. The study focused on the Oulu region.

In addition to the taxi market, deregulation and customer insight, the thesis focused on customer behaviour, customer service and customer satisfaction, which are all relevant parts of service business. In order to gain more value for consumers and taxi operators, the results were also reflected on a chosen taxi dispatch centre and its services. Oulun Aluetaksi Oy is a regional taxi dispatch centre and the reflection were hoped to bring practical insight on consumer value propositions. More focused marketing measures can be utilized, and taxi services can be targeted with a greater focus at different customer segments. The thesis had a qualitative approach for its possibilities of gaining more profound and deeper understanding.

# 1.1 Background

The taxi market has always been strictly regulated in Finland. There has been a set number of taxi cars, operating within set service hours, with 24 hours availability each day throughout Finland. Taxi drivers have gone through schooling and tests. A taxi light and taximeter both indicate the car to be a taxi, and the pricing has been the same whether one is in Helsinki or in Inari.

The Finnish taxi market was opened for competition on the 1<sup>st</sup> of July 2018 by liberating the entire business, and all the above-mentioned factors were no longer valid. With the executed changes, Finland's Ministry for Transport and Communications announced to aim for a broader fleet of different taxi services and drivers by easing

their market access. By liberating pricing, the Ministry for Transport and Communications is aiming at flexible and competitive taxi pricing. Additionally, the deregulation objectives are at increasing the Finnish taxi service quality and availability, as well as improving digitalization and taxi utilization rates. (L L 24.5.2017/320.)

The deregulation of the taxi market is not a new phenomenon: it has been implemented already in Sweden, Norway, Ireland, in the Netherlands and many countries. There have been signs of adverse deregulation effects in the European countries, and its reception by the Finnish citizens has not been solely positive. In addition to consumers' negative opinions, the media wrote a great deal about deregulation during the summer 2018.

News Now Finland (Taxi Drivers Face Uncertain Future With July Deregulation, 2018) reported on customers' concerns about quality, safety, and drivers' skills in the future. According to survey conducted by the newspaper Imatralainen (2018) with 43 respondents, 19 % of the respondents felt that the deregulation supported customer's advantages. After the deregulation, the signs of customer uncertainty continued. Taloussanomat (Kokko 2018) wrote of its readers expressing mistrust in the taxi services due to varying pricing and tricking in setting the prices. In contrast, the taxi industry in Sweden was deregulated already in 1990, and media states the results not to be in decreasing prices but in drastic mark-ups (Lansky 2009 and Foss 2013). This research concentrated on the Finnish consumer behaviour, insight, opinions and expectations around one year after the deregulation.

#### 1.2 Motivation for the research

Taxi services are a part of everyday life for different customer segments. There is no research on the effects of deregulation from the Finnish taxi customer's point of view. The deregulation effects comprehensively on the whole taxi business in Finland. In the new competitive taxi market, passengers should be regarded more carefully. Passengers are bringing the profit and being the key purpose for the entire taxi service chain. The customer has the right to choose. The knowledge of customer behaviour, expectations and values can be used for improving and succeeding in the

business. A closer look at the taxi customer insight towards today's taxi markets will ease taxi companies in business development. By understanding consumer behaviour, taxi companies can provide services that consumers are willing to buy. The correct focusing and a consumer-oriented approach are only possible when there is knowledge of consumer behaviour, needs and wants. (Schiffman 2012, 2-5; Korhonen, Valjakka & Apilo 2011, 3.) Taxi companies will benefit from the customer insight and expectations when planning the future service supply and segmentations.

The study was implemented in order to benefit the whole taxi market. Comparing the results with the deregulation outcomes in other countries, the study provides comprehension of the changes in the taxi services in the whole Europe. Authorities will gain more profound information of deregulation implications. The results will assist the directive and supervisory bodies in evaluating the possible future modifications of the taxi market regulations. Consumers can benefit from more specific, suitable and better value propositions. (Levens 2014, 79-80).

For immediate practical initialization, the results were agreed to be reflected against a local taxi operator's operation. OTAXI Oulu, formally Oulun Aluetaksi Oy, is a traditional and local taxi dispatch centre, operating in the Oulu area. With the customer insight gained from the research, a guideline of service value proposition for different customer segments can be proposed for the company. OTAXI Oulu was chosen to gain a more profound market perception from the research results in the area. Customer insight of the deregulation specifics, such as easing the market access for taxi drivers, will be practical background information for taxi driver's education. Additionally, opinions on taxi fares and supplementary services will assist in developing taxi operations further. Customer insight should be the basis for understanding consumer behaviour. With customer insight, the company can evaluate the productivity of the service concept. (Tuulaniemi 2011, 142-143.)

# 1.3 Research objectives and questions

The base for the research is the unawareness of taxi customer insight towards taxi services in the new, deregulated and competitive taxi market situation in Finland.

Customer insight is the base for customer-oriented services. The research concentrated in the Oulu area and examined opinions on the phenomenon from different customer segments.

The main research problem was to examine the consequences of the deregulation of the taxi services my examining insights from consumers in the Oulu region. There were two sub-questions:

- ✓ What do taxi consumers value with the taxi services?
- ✓ What kind of outcomes has the taxi market liberation brought to the customers?

Customer valuations can be reflected against taxi passengers' expectations and requirements towards the taxi services. During the research process the expectation was to determine, whether the deregulation had changed the consumers' mindset towards taxi services. It was interesting to examine whether the unawareness of the taxi market was still as visible as it was during the deregulation process. The expectation was that good service would still be valuable for the customers. Another expectation was that the customers would be willing to pay for a good, trustworthy service. Any other aspects that were valued and looked for when choosing a taxi service, and whether the deregulation had effected these, were intriguing to investigate.

## 1.4 Thesis structure

The thesis consists of a theoretical part, an empirical part and in the end leads to research results and the discussion parts. The theoretical part begins by reviewing literature on the taxi business in general, the taxi market liberation, taxi services as well as a taxi market review in Finland and in Europe. For the research, certain European countries were chosen for comparison due to their earlier deregulation measures and outcomes.

The literature review proceeds with the customer viewpoint. Customer behaviour and insight are carefully regarded. Customer insight is the baseline for understanding

the deregulation phenomenon from the consumers' angle. Customer service, valuation and satisfaction have an impact on overall customer experience, and these are all reviewed in the theoretical part.

The empirical part was conducted with a qualitative methodology. To gain a deep insight from taxi consumers on deregulation as a phenomenon and its effects, semistructured interviews were chosen to support the qualitative research approach. Qualitative research is justifiable, when the phenomenon is unknown, the researcher wishes to study the phenomenon more closely or the aim is to obtain a proper description of the phenomenon. (Kananen 2017, 32-33.) In this research, deregulation was the phenomenon that was researched more closely.

Figure 1 shows the thesis structure in its simplicity. Data analysis was done by means of content analysis where a theory assisted approach was applied. The data is presented in the end as profound, descriptive results. Tables and figures are used largely through the entire thesis to provide vivid information and insight on the subjects. As conclusions, proposals for the taxi market, taxi operators and other associated parties are reviewed.

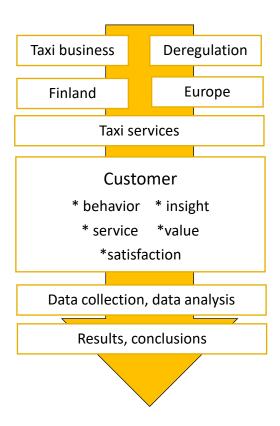


Figure 1. Thesis frame

Before going deeper into the related literature, the following chapter introduces the key concepts used in the thesis.

# 1.5 Key concepts

In this chapter, all the most central concepts used in the research are presented and explained. For a more explicit overview, the concepts are gathered into two tables, divided into taxi- and consumer-related concepts. The reader can return to Tables 1 and 2 at any point for a short look at the concepts that appear both in the theoretical and empirical parts of the thesis.

There are two kinds of taxi operators: owner-drivers and taxi companies. An *owner-driver* is a person owning and driving his or her own vehicle. The owner-driver owns a single taxi. Most of the taxi companies in Finland are small enterprises with one taxi car, meaning owner-drivers. A *taxi company* operates several taxi cars and employs taxi drivers to assist with the driving. A taxi company must be separated from owner-drivers. A *taxi operator* is a term covering both owner-drivers and taxi companies. Vehicles may be leased or owned by the operator, which is either a person or a company. In Finland the terms differ, and enterprises with single or several cars are both called "taksiyritys", meaning a taxi company. There is no other concept for a taxi operator in the Finnish language. In the thesis, the English terms are logically used.

A taxi dispatch centre or a dispatching central is a company providing dispatching services for the affiliated taxis driving for the dispatch centre. A taxi dispatch centre almost always includes booking services, and therefore, it can be mixed with a booking central. The ownership and organization may range from single to several taxi enterprises, to public authorities or specific dispatch centres. (Bekken & Longva 2003, 97-99; Henkilö- ja tavaraliikenteen luvat n.d.)

A *taxi driver* is a person allowed to drive a taxi, by a licence and additional requirements dependent on the country. A *taxi drivers' license* is always needed when driving a taxi car and providing taxi services. To gain a taxi drivers' license, an official taxi drivers' test must be taken and passed successfully in Finland. A *taxi license* is used to

refer to the license, which allows an owner-driver or a taxi company to begin operating in the taxi business. With a taxi license, one can enter the business, but is not allowed to drive a taxi car. Additionally, a car must be registered as a *passenger car subject to license usage:* in order to be able to legally provide taxi services with a specific car. Taxis mainly operate on a 24-hour basis and taxi drivers work in *shifts*. Working in shifts has somewhat changed after the deregulation. (Bekken & Longva 2003, 97-99; HE 161/2016.)

The taxi market in Finland has been regulated by ELY, The Centre for Economic Development, Transport and the Environment. All the monitoring and guidance of the taxi markets was transferred from ELY to Trafi, the Finnish Transport Safety Agency after the deregulation in July 2018. Since January 2019, Trafi is known as *Traficom*, the Finnish Transport and Communications Agency. (Liikenne- ja viestintävirasto Traficom aloittaa 1.1.2019 2018; Henkilö- ja tavaraliikenteen luvat n.d.)

After the market liberalisation, the Finnish taxi market has changed from a strictly controlled into a loosely regulated business. The Finnish government proposal of reshaping the passenger and goods transportation is called *Liikennekaari*. Liikennekaari is executed in three stages. The first stage includes the taxi market deregulation. The main objective of Liikennekaari is in digitalization and streamlining the edicts in the logistics sector. The term *deregulation* describes the process of reducing or eliminating certain regulations. The *Act on Transport Services* is the national law monitoring the details around deregulation. (HE 161/2016.)

Table 1. Taxi-related key concepts

Тахі	
Owner-driver	Owns a taxi and drives it on his or her own.
Taxi company	Operates several taxi cars and employs taxi drivers. Must be separated from owner-drivers.
Taxi operator	A person or a company, which is operating taxi cars.  Covers both owner-drivers and taxi companies.

The table continues on the next page.

Table 1 is continuing from the previous page.

Taxi dispatch centre	A centre which provides dispatching services for the af-	
	filiated taxis driving for it.	
Taxi driver	Driver driving a taxi. Not necessarily an owner.	
	Licenses	
Taxi drivers' license	A license allowing to drive a taxi.	
Taxi license	A license allowing taxi operations.	
Passenger car subject to	A car must be registered to operate as a taxi.	
license usage		
Regulations and authorities		
Liikennekaari	The Finnish government proposal of reshaping passen-	
	ger and goods transportation.	
Deregulation	Process of reducing or eliminating certain regulations.	
Act on Transport Ser-	National law monitoring the details around deregula-	
vices	tion.	
Traficom	The Finnish Transport and Communications Agency	
KELA	Social Insurance Institution of Finland	
MYK rides	Municipalities' combined rides according to the Disabil-	
	ity and Social Welfare Act	

When looking at the taxi market, good customer service is the key for maintaining operations and succeeding in the business. The related, key customer concepts are concisely seen in Table 2 below. By understanding customer needs and wants, customer insight can be gained, customer service can be improved, and customer satisfaction will be greater. In the end, a company profits from greater customer satisfaction by greater profits and overall success in business. (Kotler 2016, 11.)

Table 2. Consumer-based key concepts

Customers and consumers		
Consumer behaviour	Customer behaviour that is shown during the deci-	
	sion-making and problem-solving, having a goal of	
	satisfying the consumer needs.	
Customer insight	Deeper understanding of customer behaviour.	
Customer satisfaction	Result of successful customer experience.	
Customer perceived value	Difference between consumer's expected benefits	
	and the total costs of the service or product.	
Customer service	Good customer service provides customer satisfac-	
	tion and successful customer experience.	

All the above concepts covering the customer's point-of-view are explained in greater details and in chapters 2.4 and 2.5. A taxi customer can be every consumer using taxi services daily and regularly, once in a lifetime, or everything between these. Business customers, leisure customers, people with special needs, elderly, students, schoolchildren and others can be perceived to be different customer segments.

# 2 Literature review

This section introduces the relevant literature around the research problem. The main concepts, which have an important role for the research, are the taxi business, market deregulation, consumer behaviour, customer insight and customer service. For the present study, a solid understanding of the taxi business is the first step.

Taxi service is mainly customer service, and in comparison to public transport, it is a *personal* customer service. The taxi business is a point-to-point public service in which a driver uses his/her car for driving passengers to the desired destination for a fixed price. Taxi service is provided without regular schedules or set stations and routes. The first regulations made for profit-based rides were issued in London in the

17<sup>th</sup> century, as well as in the 1920s in the USA for horse-drawn carriages. The world's first taxi was ordered by a haulage operator Friedrich Greiner, and it was built in 1897 by Gottlieb Wilhelm Daimler (Daimler-Motoren-Gesellschaft) in Germany. The first gasoline-powered and meter-equipped taxicab was named Daimler Victoria, and it began operating in the summer of 1897, around ten years after the invention of automobiles. Greiner's horse-drawn cab and haulage company was shortly thereafter re-named as Daimler Motorized Cab Company, and it became the world's first motorized taxi business. (Hojnik 2018, 105-108; The world's first motorized taxi cab – built by Daimler-Motoren-Gesellschaft 2006.)

The taxi market can be divided into a taxi rank or a line segment, hailing segment, telephone booking segment and contract segment. Contract taxis include contracts as well as regular trips made with a variety of passengers from children to elderly people, handicapped, businesspeople and hotel clients. Contract taxis are dominant in non-urban areas but needed and used regularly in urban areas as well. Taxis providing service at the hailing and taxi rank segments are generally called street taxis, and they are the most common in urban areas and big cities. Hailing a taxi means hailing or waving a taxi from the street. Taxi ranks are mostly located in places from where the consumers are clearly seen, and customers can easily take a taxi. These places are located for example outside a railway station, shopping mall or next to a bar. The telephone booking segment usually runs through a taxi dispatch centre and includes a pre-booking possibility. A taxi is booked from a dispatcher who allocates a certain taxi for that particular trip. Nowadays, taxi booking through digital options, such as mobile applications, is expanding. (Bekken 2005; Baanders and Canoy 2010; Aarhaug & Skollerud 2014, 277-278.)

For contract taxis, returning customers and therefore a good customer service is important. As call taxis have an operator name and driver colleagues to consider, they usually cherish a good customer service to support their reputation. In a case study by Dąbroś and Sabat (Hojnik 2018, 105-118), the taxi market is described as a passenger needing a ride and having rarely any knowledge of the skills or trustworthiness of his/her driver or the safety of the car. This occurs especially when the person is travelling and being new in places. It is seen time-consuming to compare taxi providers, particularly when a consumer is hailing a taxi on a street or is in a hurry. In the hailing

and taxi rank segment, taxi drivers may not have great interest in providing a good service, as the customer may never see the driver again and as are no consequences of a bad service. From the customer point of view, these matters may create an argument to regulate the market to diminish these possible failures and threats. (Hojnik 2018, 105-108; Aarhaug & Skollerud 2014, 279-280.)

The taxi regulations have long traditions, and these can be divided into three groups: quantitative, qualitative and economic regulations. Quantitative regulation adjusts the amount of operating taxi cars in a specific city, town or region. Qualitative regulation determines the required tests and examinations for a taxi driver as well as technical requirements for a car. Thirdly, economic regulation deals with the price restrictions or fixed prices. (ibid.)

Taxi customers differ by age and background. A taxi customer can be of any age segment. Random customers use taxi only for specific needs, such as for travelling to the airport or going home after a concert or a bar night. Companies and business travellers use taxi services more often. Municipalities and cities use taxis to provide transport services for elderly people, schoolchildren, and those of medically challenged or with special needs. The Social Insurance Institution of Finland, Kela, and municipalities have combined rides according to the Disability and Social Welfare Act welfare law (shortly "MYK rides"). Moreover, they regularly tender taxi services and provide a significant share of taxi rides overall in Finland. (Kuljetuspalvelut n.d.; Taksimatkat n.d.; Palveluita joka lähtöön n.d.)

Nowadays, the traditional taxi business is being challenged by ridesharing firms. Rideshare firms such as Uber or Taxify, provide a platform which connects passengers with an available driver. The request is done by using a mobile application and a drive fee is calculated automatically. The ridesharing is banned in some countries and in some these operations are restricted. The regulation for ridesharing differs from country to country. (Hojnik 2018, 108-112.) Ridesharing companies are also named as ride-hailing or e-hailing services. E-hailing comes from the mobile application-based solution, as the rides are ordered solely through a mobile application.

Uber entered Finland for the first time in 2014. One year after this, the company was forced to leave the Finnish taxi market, since its drivers were lacking the taxi drivers'

license, which the Finnish law required. After the deregulation, Uber was able to return to Finland and begun first operating in Helsinki, while planning to operate in other cities as well. (Ohtamaa 2018; Salmela 2018.) Even though this research concentrates on the traditional taxi market and its deregulation, the ridesharing companies cannot be ignored. The ridesharing companies are a part of the taxi phenomenon in the future, also in Finland.

#### 2.1 Finnish taxi business

In Finland households spend most on accommodation, which covered on average 30.6 percent of all the household expenses in 2016. The second biggest consumption were the traffic-related expenses with 15.5 percent, and thirdly the groceries with 11.7 percent of share. Personal passenger car takes the biggest share of the whole traffic-related consumption. (SVT 2016.) Public transportation demand by the number of passengers is seen in the Figure 2. The data is gathered from the Finnish Transport and Communications Agency's performance statistics from 2016. Even though the percentage number of taxi passengers is smaller than the number of passengers using tram or metro, the travelled kilometres per customer is higher. Passengers travel 977.4 million passenger kilometres in taxi cars when for comparison the passengers travel 403.7 million kilometres in metros and only 124.5 million kilometres in trams. This shows that even though the demand percentage is smaller, the travelled distances are longer for taxis than for metros or trams. Bus, railway and airplane have the longest travelled kilometres, in that order. (Julkisen liikenteen su-oritetilasto 2016.)

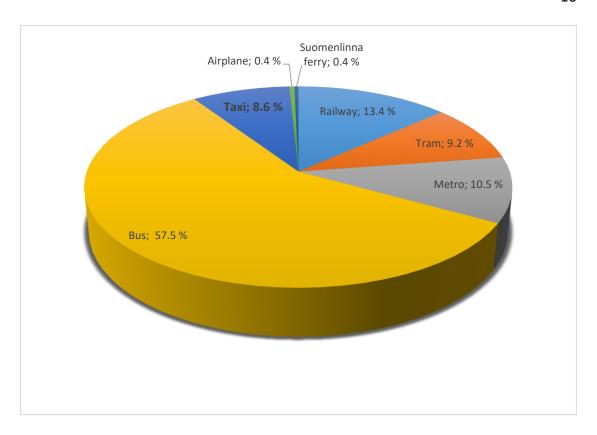


Figure 2. Public transportation share by passenger demand 2016 (SVT 2016, modified)

The Finnish taxi business has been highly regulated with fares set by the government and a limited number of licenses have been granted to serve each municipality. As a result, taxi services have always been available even in the rural areas. The pricing has been the same whether you order a taxi in a small town or in the Finnish capital, regardless of the taxi operator. Most of the taxi companies belong to a certain regional taxi dispatch centre, from where a taxi can be centralized ordered.

In 2014 there were altogether 8161 taxi operators in Finland. The number has been in a minor downturn: in 2015 there were 8014 taxi operators and in 2016 only 7801 operators. One operator could have more than one car, however for each taxi car the owner needed to have a valid taxi operator's licence. Only a certain amount of licenses were granted, and the maximum number was affirmed by ELY, The Centre for Economic Development, Transport and the Environment. In 2016, the average taxi operator's turnover was 140 000 euros per taxi operator. (HE 161/2016; Metsäranta, Tervonen & Jaakola 2018.)

Most of the taxi operators are small enterprises. Even though a taxi operator can have one or several taxi cars, most of the taxi professionals are entrepreneurs with one car, meaning owner-drivers. By the end of 2018 more than 69 % of the taxi license holders were private enterprises and only 25 % were limited companies (Oy, osakeyhtiö in Finland). By the end of June 2018, there were 30 884 valid taxi drivers' licenses in Finland. (Henkilö- ja tavaraliikenteen luvat n.d.)

According to Kalustomarkkinat, LiikenneFAKTA equipment statistics (n.d.), in the 2015 there were 10 313 passenger cars subject to license usage. This means that 10 313 cars were registered to be used not only for private use but also for license purposes like taxi or cargo business. As seen in Table 3, in 2016 the number was decreased to 10 076 cars and into 9 926 cars on 2017. When counted with the number of taxi operators, a taxi operator had approximately 1,3 cars in 2015 and 2016.

Table 3. Passenger cars subject to license usage (Kalustomarkkinat, n.d.)

YEAR	CARS REGISTERED
2015	10 313
2016	10 076
2017	9 926
Q3/2018	22 313

After the deregulation in 2018, which will be discussed more closely in the following chapter, there was a drastic increase altogether into 22 316 cars subject to license usage. Even though passenger cars subject to license usage include cargo transport as well, the number of cars at cargo transport are only rarely passenger cars. Normally cargo transport uses pickups (6 904 registered in 2017) or trucks (34 372 registered in 2017) and therefore it is justifiable to state that there were approximately 9 926 taxi cars in Finland in 2017 which was drastically increased into 22 316 after the deregulation. (Kalustomarkkinat n.d.; Kokkonen 2018).

# 2.1.1 Deregulation in Finland

On the 1<sup>st</sup> of July 2018, the Finnish taxi market was opened for competition. The deregulation project in Finland is included in *Liikennekaari*, a project set by the Finnish government. The taxi deregulation is only a part of Liikennekaari, while digitalization of the business environments in the logistics is the main purpose and project target. Liikennekaari is planned to be executed in three stages, while the third stage is concentrating especially on improving the digitalization in logistics. The first stage concentrates on the road traffic reforms, including the taxi market deregulation. In the second stage, these renovations will be expanded to effect also the air, sea and rail traffic. (HE 161/2016.)

Along the deregulation, taxis are not anymore linked geographically to their registered area, and operators are free to offer rides all over Finland, with fares and pricing criteria the taxi entrepreneur sets. The pricing principles, though, must be easily perceptible for the customer. A taximeter is required only if the pricing is based on time or travel kilometres. The passenger must be informed of the calculated price, including the tax, before the ride. If it is not possible to give an accurate price in advance, the basis for calculating the price must be clearly expressed. The total price, or the basis for calculating the price, shall be announced in a clear and unambiguous manner that is easy for passengers to understand.

The taxi can be any road-worthy vehicle, the only requirement is to have the vehicle with at least three wheels. The yellow taxi light on the roof is no longer required, but the light grants the right to utilize the taxi stands and lanes. Rules for obtaining a taxi driver's license have been loosened and there is no compulsory taxi course to attend, only a driving test and a medical certificate on driving capacity are needed to qualify. There are no regulations for maximum number of cars or drivers in the municipalities. Additionally, the service obligation was removed, and the taxi companies can decide the most suitable times to operate. (L 24.5.2017/320.)

After the deregulation, all the monitoring, guiding and informing in issues of personnel and goods transport in Finland, was shifted from ELY (The Centre for Economic Development, Transport and the Environment) to Trafi. After the 1<sup>st</sup> of January 2019, Trafi (The Finnish Transport Safety Agency) is known as *Traficom*. The new Finnish

Transport and Communications Agency called Traficom has been formed as Trafi, the Finnish Communications Regulatory Authority (FICORA), merged with the certain functions of the Finnish Transport Agency. (Liikenne- ja viestintävirasto Traficom aloittaa 1.1.2019 2018.)

A taxi license is required for the commercial road transport of passengers. The passenger transporting can be done by a passenger car, a van, a lorry, a tricycle, a light quadricycle or a quadricycle. When a person already has a passenger or a goods transport license and is aiming for the taxi service operations, it is adequate to submit a notification to Traficom. The taxi license is valid for 10 years from its date of issue. Being of legal age and without any serious neglects in the past, a taxi license is easy to apply and get approved. Before the deregulation, there was one license for each taxi car. After the deregulation, one license is valid from one to unlimited number of cars that are driving in a region chosen by the license holder. (L 24.5.2017/320, Part II Section 2, 2 §; 4§ & 8 §.)

To be able to drive a taxi car, the driver must have a taxi driver's license. Before the deregulation, a taxi drivers' training was obligatory. Afterwards, passing a taxi driver's test is enough. A medical certificate on driving capacity and a valid category B driving license issued at least a year earlier, are required. The taxi driver's test must be passed, either in the Finnish or in the Swedish language. Applicant's criminal and penalty records are inspected. The taxi driver's license is valid for 5 years from its date of issue. As a summary, when starting a taxi business, a taxi operator needs a taxi license, and the driver must have a valid taxi driver's license. Additionally, the car must be registered subject to license usage. (L 24.5.2017/320, Part II Section 3, 1-2 §.)

After the 1<sup>st</sup> of July, there was a drastic increase in applying the taxi licenses. As seen in Figure 3, in July 2018 Trafi accepted over 1350 new taxi licenses, meaning the quantity of the new entrepreneurs who are aiming to enter the taxi market. However, a taxi license does not include a taxi driver's license, solely the permit to begin as an entrepreneur. (Liikennelupatilastot 2019; L 24.5.2017/320.)



Figure 3. Total number of the accepted taxi licenses in Finland (Liikennelupatilastot 2019)

When comparing the license numbers from the previous years, Table 4 clearly shows, how drastic the growth of the taxi licenses was after the deregulation. In June 2018, there were 9550 taxi licenses, which got a rapid addition of 3232 new approved licenses in the period July 1st till December 31st, 2018. i.e. after the deregulation. Moreover, 406 new notifications were made by those drivers who already owned of passenger or goods transport license as explained previously (see page 19).

Table 4. Yearly taxi license numbers in Finland (Kalustomarkkinat n.d., modified)

YEAR	TAXI LICENSES
2014	9905
2015	9800
2016	9636
2017	9553
2018	13 198

As clearly seen in Table 3, there was a drastic increase with the cars subject to license usage after the market deregulation. Summarized the increase was from 9 926 cars (in 2017) into 22 316 cars by the end of Q3/2018. The increase of taxi car numbers was strongest in the metropolitan area around Helsinki, where extra 1600 taxis were driving by the end of September 2018. Other growing areas were Lapland, Finland Proper and Northern Ostrobothnia. A marginal decrease in the amount of taxi cars were perceived in South Karelia, where 11 taxi cars became off duty. (Kalustomarkkinat n.d.; Kokko 2018.)

Furthermore, the number of taxi driver's licenses has grown after the deregulation.

By the end of June 2018, 30 884 valid taxi driver's licenses were existent in Finland. During July-October 2018 there were 2 577 new taxi drivers' license applications, from which 2 482 were approved. Most of the licenses were applied and approved in Helsinki, Oulu and Vantaa. In comparison, between 2015-2017 around 1400-1600 taxi driver's licenses were approved yearly. (Henkilö- ja tavaraliikenteen luvat n.d.) With the changes in the taxi regulation, the Finland's Ministry for Transport and Communications announced aiming for developing digitalization and increasing both services and jobs in the transport business. By creating a broader fleet of different taxi services, the Finland's Ministry for Transport and Communications aspires at an increase in the service demand. The bureaucracy, and by-product expenses, are minimized. The number of taxi entrepreneurs and drivers should increase since the market access is made easier. The government proposes that the decrease in taxi prices benefits directly the customers as well as the whole society. The taxi utilization shall improve with the changes, as should the taxi service quality and availability. (HE

#### 2.1.2 Studies conducted on the Finnish taxi market

161/2016.)

There are a few previous theses made on taxi service usage in Finland, including comparisons and impacts of the taxi market deregulation in general. Only those researches done after the 2013 were included for this thesis. Even during the last six years there have been many changes in the market and in consumers' expectations,

which must be considered when comparing the studies to current situation. Nevertheless, these studies provide a good basis and contrast for this thesis. Along with the earlier theses, several studies and statistics, which were made after deregulation, are presented in this chapter.

#### Theses on the Finnish taxi market

When studying results and analyses of three studies on taxi service usage and customers' expectations, there are visible similarities. The theses are made in 2013, 2015 and 2017. Young adults use taxi services rarely due to high prices. Most of the taxi consumers have a somewhat higher income, or they use taxi services for work. Good quality and trustworthy taxi services are the most appreciated. Additionally, the taxi driver's expertise, vehicle cleanliness and customer service were stated to be important. Koskinen (2013) as well as Jääskeläinen and Kyllönen (2015) both investigated in their studies the need for additional services during a taxi ride. The studies could not identify a real need that would provide added value for passengers. One reason for this was mentioned to be the shortness of a regular taxi ride. The studies were made in the Helsinki metropolitan area as well as in the region of Northern Savon. (Koskinen 2013; Jääskeläinen & Kyllönen 2015; Piipponen 2017.)

Kukkonen researched the deregulated taxi markets in his thesis on 2016, using internet sources and the Swedish taxi industry as a comparison. A need for a deregulation in Finland was already established by the time, and the thesis concentrated on the positive and negative changes which deregulation could bring after its deployment. The results were dramatically against Liikennekaari and deregulation was not recommended to be executed as it was planned. Kukkonen (2016) highlighted a few negative impacts, such as increased prices, disappearance of the 24-hour service and taxi shortage in rural areas in his study. Additionally, oversupply of taxis in the cities and differences in service levels were highlighted. (Kukkonen 2016, 46-51.)

In 2017, Ahokas wrote a thesis on the effectiveness of a regulated market and highlighted the threats caused by deregulating the taxi markets. Data was collected from secondary sources and supplemented by interviewing an experienced taxi entrepreneur. The results were compared with the data collected from countries which had already liberalized their taxi markets. The results revealed future uncertainty for taxi entrepreneurs and decreased income for taxi drivers due to increased competition. As a threat to the passengers, increased taxi prices and lack of nationwide services were highlighted. Charging both for the travelling minutes and travelled kilometres was highlighted as an example of pricing in Sweden, which may complicate the calculation of a taxi fare. Grey economy was also considered to be a future threat for the taxi business. For improving taxi utilization, Ahokas suggest that the service demand should be increased, which was not essentially verified in the liberalized markets.

As a side note, all the above-mentioned researches were Bachelor theses that come with somewhat limited volume for scientific reliability. The study Kukkonen wrote in 2017, was made for the Finnish Taxi Association and only the Swedish taxi market was compared. In the thesis of Ahokas (2017), merely one taxi entrepreneur was interviewed, and therefore only one opinion of the coming changes was received. (Kukkonen 2016; Ahokas 2017.) These theses can, however, be regarded as bringing support and insight of the earlier Finnish taxi market deregulation expectations. No other scientific or master's level research of the Finnish taxi markets was written between 2013 to 2018. Additionally, the studies were all conducted in the metropolitan area and they were not comparable to the Oulu region as such.

#### Studies on the Finnish taxi market

In the study made of Kela taxi fares already in 2015, it was noticed that especially elderly people living in rural areas prefer using familiar taxi drivers. It was seen important that a familiar driver knows the individual needs of the customer, can act as a companion and may assist in problematic situations if needed. Seniors trust the familiar driver and tell their troubles and concerns. In the discussion, the researchers proposed extended possibilities in gaining familiar drivers for elderly people in rural areas, based on social reasons. (Tillman, Kaliva 2016.)

Despite the increase in taxi license, taxi car and taxi driver amount, there have already been signs of lack of taxi services in some areas. There have been cases where a newcomer, after winning the public tender, has not been able to fulfil or provide

the agreed services. An example of these are Kela and cities' combined rides (combined rides according to disabled and social welfare law) tenders. Kela, The Social Insurance Institution of Finland, oversees the benefits under the national social security programs. The Finnish Association of People with Physical Disabilities published a study in October 2018 regarding the problems which the Kela rides were causing. 80 % of the passengers entitled to Kela's taxi rides in northern Finland were quite satisfied with the service. Elsewhere in Finland, plenty of negative feedback and improvement wishes emerged. The Finnish Association of People with Physical Disabilities has published several articles about their members, who have had to stay at home due to the lack of taxi services after the law change. (Mitä mieltä taksipalveluista?, 2018; Tervamäki, 2018; Saksanen, 2018.) By the end of 2018, Kela renewed the tendering process in the Uusimaa region due to the lacking taxi service. (2018/S 203-462332.) Additionally, the municipalities' combined rides have not been valued by customers in every region. In the Oulu area, the MYK rides have been highly criticized in several newspapers' letters to the editor columns after the 1st of July 2018. (Oulun kuljetuspalvelut kilpailutettiin uuden taksilain myötä – palvelussa vähäisiä muutoksia, 2018; Oulun Kaupungin Myk-kyydit, 2018.)

Suomen Taksiliitto (the Finnish taxi alliance) subcontracted a taxi service research with Taloustutkimus. Taloustutkimus is a market research company operating in Finland and in a few nearby countries. Research was made after the deregulation and the results were published in October 2018. According to a questionnaire conducted on 1000 Finnish respondents, aged between 15 to 79, the customers' trust towards taxis and taxi drivers is high. Taxi service is seen as a high-quality service as 93 % evaluated a taxi ride to be 'good' or 'excellent'. Trust towards taxis and taxi drivers was seen 'quite strong' or 'very strong' among 83 % of the respondents. However, deregulation was regarded as successful only among 18 %, whereas 44 % of the answerers found the deregulation to be a failure. Even though the results showed strong trust in taxis and drivers, 43 % of the respondents committed that after the 1st of July 2018 their trust in taxi system has become weaker. (Holm 2018.)

Even though one of the objectives for deregulation was an increased service availability, in the Holm's Taxi service research (2018), the most dominant reason for the consumers' critics concerned decreased availability and increased waiting times.

When asked for the most valued aspects when choosing a taxi service provider, distinctly the two most important features were 'easiness of ordering' and 'fast arrival'. Thirdly important value was reported to be 'best price-quality relationship' and fourth 'driver's expertise'. Other aspects had remarkably lower answer rates than these first four. Taxi usage and purposes remained the same than before deregulation. 18 % of the respondents admitted being comparing taxi prices when choosing a taxi service provider. Second important objective for deregulation was a decrease in taxi pricing, which nationally was realized in July 2018. However, as stated in the Figure 4, in October the prices already exceeded the taxi prices from June 2018. (Taksimatkojen kuluttajahintaindeksi 2016-2019.)



Figure 4. Taxi fare index Jan 2016 - Jan 2019 (Taksimatkojen kuluttajahintaindeksi 2016-2019)

The taxi fares increased the rest of the year, ad in the December 2018 a taxi fare costed 4.4 % more than in June 2018. The figures are collected on March 2019 from the National authority for collecting and compiling statistics on various fields of society and economy. (ibid.)

Nine months after the deregulation, The Finnish taxi alliance subcontracted Value Clinic for a taxi market research, which was published in July 2019. The survey was conducted with 948 taxi consumers coming from overall Finland. The results show that the overall taxi usage has decreased and over half of the participators reacted negatively to taxi usage. However, one fifth of the consumers who are using taxi services regularly, considered the service quality to be improved in general. Around one third of the respondents regarded the taxi availability to have weakened. (Paananen, 2019.) By the July 2019, The Consumers' Union of Finland published a briefing of the taxi business. The briefing aimed at appealing the Finland's Ministry for Transport and Communications to fix the appeared issues, in order to return customers' trust in the taxi markets. The issue, which the union raised in the briefing, was the difficulty of comparing the taxi prices. Along with pricing, the union mentioned availability issues in certain areas as well the importance of service quality and safety for the customers. When applying for the taxi driver's license, the union called for sufficient language skills and local knowledge. (Taksialan ongelmakohdat korjattava pikaisesti, 2019.)

# 2.2 Deregulation in Europe

Certain studies argue that the taxi market, with its large number of consumers and suppliers, combined with the low entry costs and absence of economies of scale, would be most efficient with as little regulation as possible. Deregulating the taxi market would lead to lower prices and better supply. Mostly within these arguments, taxi deregulation was advocated in the 1990s, primarily in the USA, New Zealand and in Australia. In Europe, taxi deregulation was implemented among first countries in Ireland, Sweden, Norway and the Netherlands. In this chapter, these European countries and their deregulation effects are presented. (Baanders & Canoy 2010, 13.)

#### Sweden

In 1990, the Swedish taxi market was deregulated in five steps. Barriers of entry were removed, fare controls were eliminated, requirement to belong to a radio-dispatch

service was dismissed, geographically restricted operating areas were eliminated and finally the operating hours were removed. The Transport Policy Act argued the deregulation brings lower fares and increased efficiency, better accessibility, larger taxi companies as well as diversification and increase in the taxi services. The current regulation was regarded as expensive, leading to lower productivity and slower technological advances.

According to interviews and taxi data collecting made four months before and eight months after the deregulation, several changes in the Swedish taxi market were already discovered. The number of taxi cars was increased in both small, medium-sized and large municipalities. Customers rated the driver, dispatch service and vehicle comfort to be quite the same as earlier, however there was a drastic increase in the taxi prices. Eight months after the deregulation, there were no new types of taxi services, which was one of the expectations of The Transport Policy Act. Later some new services emerged in the rural areas in forms of transporting goods or combining trucks, busses and taxis within the company. From year 1990 to 1994, the number of small one-taxi companies was increased from 50 % into 75 %. Competition and increased number of vehicles caused both positive and negative effects on the vehicle productivity, dependent on the region. tudies 9 years after the deregulation indicate that the low level of efficiency still prevails in the Swedish taxi market.

In Sweden a new type of taxi competitor entered the market after the deregulation and was named as a "single-cruising cab". As stated earlier, passengers rarely have any knowledge of the trustworthiness of a taxi driver, especially when travelling as a tourist. These "single cruising cabs" entered cities operating on their own, charging extra for the ride. Charging of extra was primarily possible due to the customers' lacking experience and uncertainty of the fare levels, moreover due to the difficulties of comparing services and uncertainty of the next available taxi. Sweden is the only country from the four reviewed in this chapter that has no fare regulation in the entire country. (Gärling, Laitila, Marell & Westin 1995, 209-214; Marell, Westin n.d.)

#### The Netherlands

The taxi market in the Netherlands was deregulated in 2000, ten years after deregulation in Sweden. The market was similar to the Finnish and Swedish taxi markets before the deregulation: having limited number of taxi licenses and fixed fares. The regional license quantity limitations were removed, and nationally solid maximum pricing was deployed. The maximum prices were set relatively high compared to the average prices before the deregulation. The taxi lines were renewed to resemble herringbone pattern, in order to give customers a freedom of choice when choosing a taxi from many staying in the line.

In 2008, the taxi pricing was re-structured and changed to be more predictable for the customers. In the new structure, starting fee included first two kilometres and there was no waiting fee during the ride. The aim for the renewed structure was to make the short trips more wanted among the drivers and pricing to be dependent only on the distance. Taxi dispatch centres differ in the Netherlands compared to many other deregulated countries. A taxi dispatch centre is not allowed to set prices for its drivers, who are individual entrepreneurs. Therefore, when calling a taxi centre, the customer may not have the possibility to get any taxi prices beforehand.

Ten years after the deregulation, taxi prices were increased instead of going down. In a period of four first years after the deregulation, the number of taxis was grown by 50 %. The number of taxi trips was decreased but the rides were longer instead. Taxi drivers refused to use herringbone layout at the taxi lines and later the layout disappeared from the big cities. It was noted that comparing the taxi prices was almost impossible for a customer. Due to the price increase and negative publicity, there were 12 million taxi trips less in 2003 than in 1999 in the four main cities. To protect passengers from problems such as cheating, intimidation and aggression, Amsterdam made new parking regulations for taxis as well as regulated the usage of the tram and bus lines. Schiphol airport as well as Amsterdam Central Station regulated their taxi lines individually. The service quality of drivers was noted to be poor and some places were lacking taxi services whereas others were overloaded with taxi cars. As in Finland and Sweden, one of the deregulation objectives was innovation. Only a few marginal initiatives were taken in the Netherlands and innovations remained minor. In 2008, the deputy minister of transport admitted, that the deregulation in the

Netherlands did not meet the expectations and plenty of new studies were announced to be still conducted. (Baanders & Canoy 2010, 1-21; Bekken & Longva 2003, 27-35.)

#### Ireland

In Barrett's (2010) article, the sustained impact of taxi deregulation in Ireland was closely examined. The Irish taxi market was deregulated in 2000, however the taxi fares remained regulated with fixed maximum fares. The Barrett's study aimed for finding correspondence for the thought negative impacts of the taxi deregulation, which were listed by The European Conference of Ministers of Transport (ECMT, now incorporated in the OECD, Organisation for Economic Co-operation and Development). The proposed negative aspects included points such as an increase of accidents, a street chaos, an airport overload, a service shortage in rural areas, and a decline in vehicle condition. None of these were reported to have occurred in Ireland. While fighting among taxi drivers was seen happening in the Netherlands and in Sweden, this was reported in Ireland.

The negative impact found was the depressed earnings of the drivers as taxi driver's earnings in Dublin fell by 5 % between years 2000 and 2005. Due the depressed earnings, 8.3 % fare increase was executed later in the 2008. Even though the number of taxis were increased, the demand did not increase the same way as supply. This caused profitability to decrease, putting pressure on the service quality. For the customers, a reduced waiting times was a positive deregulation impact. This was caused by 502 % increase on taxi numbers by the end of the year 2008. In its entirety, deregulation effected mainly on entry restrictions, which were removed in Ireland. (Barrett 2010, 61-65; Bekken & Longva 2003, 17-26.)

#### Norway

Norway is a sparsely populated country, and the access to the taxi market is regulated through operator's licenses for certain areas, whereas the regional authority decides the number of licenses. The taxi license is personal, limiting the operator to a

single vehicle. Norway has set the maximum fare price for the taxi rides. However, some of the biggest cities have liberalized the prices in 2000. As a comparison to other countries, only Sweden and some extent Norway (certain large urban areas) have deregulated the taxi prices. As a result, the fares increased and issues with price information were noted. Added to increased prices, also the fare differentiation increased, making the drivers to favour night-time for work. As a positive impact, increased number of drivers at night-time led to improving the mismatch between the supply and demand at these times. (Bekken & Longva 2003, 43-48; Bekken 2005, 18-19.)

#### **Summary of the outcomes**

According to the earlier empirical studies conducted in the deregulated taxi markets, the biggest market imperfection found was the weak bargaining position of the passenger as well as the asymmetry of quality aspects and information, which the passenger cannot observe. The driver has a monopoly power once the passenger has chosen the taxi, and if not monitored or checked, this may lead to higher prices and lower quality. Moreover, low entry barrier may lead to lower quality and lower reliability of the service, as well as to oversupply in the certain areas.

Sweden, Ireland and the Netherlands have deregulated the barriers to enter the taxi business. Most obvious positive results were the reduced waiting times and increased availability, mostly in the cities. Nevertheless, the taxi service utilization was commonly decreased. In the rural areas, some lack of availability occurred. In each of the deregulated country, taxi fares increased, and some price differentiation occurred. Straightforwardly, there is a pattern with the taxi number increase and reduced waiting times, with the fare increase and decreased utilization. This, however, does not necessarily seem to be linked to falling service quality and vehicle standards. ssues with insufficient enforcement have been approached by focusing on self-justice among taxi dispatch centres and taxi operators, as well as by increased professionalization and concentrated training in these countries. (Baanders & Canoy 2010, Bekken & Longva 2003, 69-75, Bekken 2005, 19-25.)

#### 2.3 Taxi services

Taxi service includes more than solely driving a taxi from one place to another. Taxi service is regarded as a professional customer service. Passengers' interests are considered carefully. A taxi service begins from booking or hailing a taxi. The ordered taxi, equipped as the passenger desired and ordered, is expected to arrive to an agreed place in a correct and wished time. The driving must be professional, bringing the customer to the agreed place, through the most suitable route. The passenger must be allowed to pay in cash or with the most commonly used payment cards, unless earlier otherwise with mutual understanding agreed. If the service content, manner of performance or the result of the service does not conform to what was agreed, it can be considered as a defect in the taxi service. In case of a taxi service defection, general principles of the contract and consumer laws are applied in Finland. (Aarhaug & Skollerud 2014, 277-279.)

The Act on Transport Services in Finland has set several requirements on the taxi driver's customer service skills, including following:

- ✓ The driver must ensure passengers' safe boarding and alighting.
- ✓ The driver must offer the passengers any assistance that may be required, taken specially into account passengers with restricted functional capacity.
- ✓ The driver must have adequate interaction and language skills.
- When the passenger leaves the choice to the driver, the driver must choose a most inexpensive and appropriate route. This must be considered when the price is calculated based on the length or duration of the journey, and the driver has the local knowledge required for this.

Additionally, the Act on Transport Services has set a requirement that drivers are *expected* to be *familiar* with the local area. This requirement may be adjusted in the future. The Finnish government made the decision to remove the local knowledge exam from the taxi driver's requirements starting from 1<sup>st</sup> of May 2019. (Uusi määräys: Taksinkuljettajan kokeen vaatimukset, 2019.)

The offered taxi services vary between the taxi operators. Normally a taxi service includes a ride with a passenger car or a minivan, dependent on the passenger quantity in the simplest case. There are different types of taxis for the disabled passengers. Taxi service can also be targeted to a designated customer segment or it can provide added value that only specific consumers require or wish. Searching and

comparing the Finnish taxi companies and their services, several additional taxi services are found. OTAXI provides VIP taxis for companies, weddings and other consumers expecting something extra. Additionally, OTAXI provides branded taxi stands to be placed temporarily or permanently outside a hotel or similar. There are branded OTAXI payment cards for the business users. OTAXI operates in Oulu, Kuusamo-Ruka and Ostrobothnia areas.

OTAXI is not the only one providing VIP or premium taxi services. Kovanen provides charter services, limousines, branded Kids services, special airport taxi services and courier services. Kovanen operates both in Oulu and in the Helsinki areas. Taksi Helsinki and Lähitaksi operate mainly in the Helsinki metropolitan area. Lähitaksi offers prepaid and other branded payment cards for the taxi consumers. Similar to Kovanen and Taksi Helsinki, Lähitaksi provides taxi courier services for small packages, as well as special airport taxi services. As OTAXI, Lähitaksi and Taksi Helsinki provide a service for temporary taxi stands, around bigger events and similar. Both Lähitaksi and Taksi Helsinki offer premium taxi services, comparable to OTAXI VIP and Kovanen Charter services. Taksi Helsinki provides customer programs and has launched special taxi services for seniors. All the four companies provide different taxi service booking possibilities, including calling, e-mailing, mobile ordering and alternatives for key account's needs. Smaller taxi companies in rural areas usually have the basic taxi services and taxi ordering by calling. (Yrityksille, n.d., Palvelumme, n.d., Palveluita joka lähtöön, n.d., Taxi Service, n.d.)

# 2.4 Consumer behaviour

Consumer behaviour can be defined as "the behaviour that consumers display in searching for, purchasing, using, evaluating and disposing of products and services that they expect to satisfy their needs" (Schiffman 2012, 2). Consumer behaviour can be divided into personal consumer and organizational consumer entities. Individual consumer makes the purchases for his or her own usage, when an organizational consumer has a purchasing process of a government, institution, company or similar.

The importance of understanding consumer behaviour can be clarified when comparing a *selling concept* and a *marketing concept*. In the selling concept, a company is determined to sell products or services, which the company has decided to produce. This is done regardless of the consumer needs and wishes. In the late 1950's understanding of the marketing concept grew. The purpose for the marketing concept is to produce and provide goods and services, which *consumers* wish to buy. Focusing on customers and performing consumer-oriented approach is possible only when consumer behaviour, needs and wishes are known. (Schiffman 2012, 2-5.)

Consumers make purchase decisions based on different factors, including for example price, recommendations or service characteristics. There are considerable number of factors influencing the decision-making process. These influencing causes can be divided into *personal*, *psychological*, *situational* and *social elements*. Personal characteristics include self-identity, personality, age and life stage, lifestyle, occupation and financial situation. Psychological elements that are influencing the decision-making cover motivation, perception through different human senses, beliefs and attitudes as well as knowledge. Place of purchase, time, digital environment and context form the situational influencing elements. Additionally, social characteristics such as culture, social class, gender roles and family effect on the decision-making process. The influencing causes are gathered to Table 5 with examples of influencing factors. (Levens 2014, 97-102.)

Table 5. Factors influencing the decision making (Levens 2014, 97-102, modified)

PERSONAL	PSYCHOLOGICAL	SITUATIONAL	SOCIAL
Self-identity,	Perception: seeing,	Time: length and	Culture: values,
uniqueness	hearing, smelling, tast-	needed efforts to	religion, morality,
	ing and touching	make the purchase	habits
Personality	Motivation	Shopping environ-	Subcultures
		ment	
Age	Beliefs: sense of truth	Digital environ-	Groups: several
		ment: web, social	kinds of
		media	
Current life	Attitudes: based on ex-	Context, purchase	Social class: edu-
stage	perience	circumstances	cation, power,
			habitation etc.
Lifestyle	Knowledge, learning		Family members
Vocation			Gender roles
Affluence, fi-			
nancial			

Consumer decision making process consists of recognising a need, searching of information, comparing alternatives, making a purchase decision and finally evaluation after the purchase. The whole decision chain is seen in Figure 5. Depending on the decision and how much effort a customer is willing to make for a purchase decision, some problem-solving may occur during the process. Problem-solving is divided into limited, significant and routine response problem solving manners, dependent on the effort level. (Levens 2014, 96-103.)

• External influences: social elements

• Problem / need / opportunity recognition
• Information search
• Evaluation of alternatives: personal, psychological, situational elements are influencing
• Purchase decision

• Post-purchase evaluation
• Trial
• Repeat of the process

Figure 5. Decision-making process (Levens 2014, 97; Schiffman 2012, 69, modified).

When the output is good, and the consumer is satisfied with the purchase choice, repurchasing can easily occur. The problem-solving, despite of its level, should be aimed to work for the company's advantage. When keeping the whole decision-making process in mind and understanding the customer behaviour in each of the levels, the company has a possibility to add value for the customer as well as to create many financially rewarding relationships with its customers. (Levens 2014, 96-103.)

## 2.5 Customer insight

Customer insight is a deeper and closer information and understanding of customer and marketplace needs. Insight means comprehending the inner nature of things and is also defined as seeing intuitively. The need is not for additional information, but for better information and better use of the gathered marketing information. In its simplicity, more profound use of marketing information leads to creating customer insight and adding value. Customer insight is not only the basis for creating customer

value, but also for building and strengthening relationships. With the knowledge of customer preferences and values, customer insight can be used for improving actions and succeeding in business. Customer insight is the key for sustainable and profitable competitive advantages. Deeper customer insight is also an important aspect when changing from a product or service-oriented approach into a customer-oriented approach. The core purpose of a customer-oriented approach is to fulfil the customer needs. With the gained customer information, fulfilling customer needs is possible when focusing and concentrating on the right aspects. (Arantola 2009, 2-3, Kotler 2016, 101; Korhonen, Valjakka & Apilo 2011, 3; Levens 2014, 111.) Visualization of how customer insight and marketplace understanding is linked to the marketing processes, is seen in Figure 6. Even though customers' basic needs and wants are less than customer insight, the *understanding* is a vital part of a true customer insight (Kotler 2016, 11.)

## **Understanding**

- Marketplace
- Customer needs and wants

#### Designing

• Customer-oriented marketing strategy

#### Constructing

• Integrated marketing programme to deliver customer value

## Building and creating

- Profitable relationships
- Customer delight

## **Capturing**

• Value from customers in return -> profits, customer equity

Figure 6. Simplifying a marketing process (Kotler 2016, 11, modified)

The right kind of information, which can be turned into customer insight, can be gathered from internal data, marketing intelligence as well as marketing research. *Internal data* is a company's own database, including all the information a company has received when interacting with its customers. This database can include information e.g. of buying behaviour, service problems, delivery schedules and competitor activities. *Marketing intelligence* on the contrary comes from systematically collected and analysed, publicly available information. Marketing intelligence includes information about consumers and customers, competitors and market developments. The means to collect information vary widely from observing competitors or consumers, monitoring published information and websites, or even mingling among customers. The goal for collecting information is to gain better insight and understanding of consumer environment, tracking competitor's movements and getting early information of threats and opportunities. All this information improves company's strategic decision-making. (Kotler 2016, 103-105.)

Third information gathering method, *marketing research*, consists of collecting information that is relevant to a certain marketing problem, which a company is currently facing. After defining a specific problem, research objectives must be set. The objective can be either exploratory, descriptive or a causal research. The exploratory research gathers preliminary information for already somehow known problem. Descriptive research aims as named in describing things, such as market or consumer attitudes, whereas causal research tests cause-effect-relationship hypotheses. After setting the research objective, a research plan for collecting data from primary and secondary data sources is developed. This is followed by implementing the marketing research plan in question. Implementation includes gathering of information, processing, and information analysing. After interpreting and reporting of findings the gained information can finally be applied into practice. (Kotler 2016, 105-122.)

Customer insight capability is true, when the knowledge of customers and markets is available for decision-makers in everyday situations. The understanding should be common inside the company and the gained comprehension and insight must be improved systematically and goal-directed. Processes, knowledge and skills, as well as suitable resources and tools, are required for building this kind of customer insight capability. (Arantola 2006, 116.)

#### 2.5.1 Customer service

Customer service is a two-sided concept, including a service provider and a service user. Service can be a transaction, deed, action or occurrence, where *added value* or possibility for added value is provided for a customer. The added value can be in a form of a problem solution, easiness, experience, enjoyment, delight or saving of time, among other things. Immateriality, being produced and consumed simultaneously, is often a central thing in customer service. Service cannot be stored when it is repeated continuously in each customer service situation. Customer service is one of the most important competitive advantages and a good way to differentiate from the competitors. Service is made *for* a customer in a specific customer service situation. The customer is the one to determine, whether the customer service is good or bad. The service provider can merely influence the customer satisfaction and experience flow with his or her own actions. How the customer experiences quality, measures the received service quality. (Lahtinen & Isoviita 2004, 38-39 & Rissanen 2006, 17-18.)

Primarily the service is influenced by what happens during the interaction between a service provider and a customer. The experienced service quality can be divided into two scopes: technical, end result-oriented scope as well as functional, process-oriented scope. What a customer receives from the interaction is a technical aspect. In the taxi business, ride is the service provided received by the customer. How is the functional aspect of the customer service process. How was the taxi ride driven, was the experience and service high-quality or not? There are also additional scopes, which certain researchers have proposed to be added to these two quality aspects: where the service is provided and financial consequences of the service. In the taxi business, where is a good quality aspect to consider, as the experienced service quality is assumingly lower if the car is dirty or smelly. Additionally, when the ordered car arrives late and the customer misses his or her flight, the occurred financial consequence surely effects the experienced service quality. (Grönroos 2001; 100-102.)

A descriptive, practical framework for looking into customer service is 7 P's framework. The fundamental framework of marketing mix, 4 P's, was invented by McCarthy already in 1964. 4P's framework covers product, price, promotion and place, and

has been used and modified by other researchers ever since. In the end, the main purpose of a marketing mix is to satisfy customer needs and to gain competitive advantages. Marketing mix is often used by marketing managers for directing a specific marketing strategy to a specific customer segment. For services marketing, Booms and Bitner introduced in 1981 an extended version by adding three sectors on the marketing mix. (Levens 2014, 308-309; Grădinaru 2016, 311-314.)

In Booms and Bitner's 7P's framework people play a significant role in providing the customer service experience. The quality and service performance of the employees should be carefully considered and monitored. 4P's is claimed to be insufficient among certain researchers, whereas 7P's framework is seen more comprehensive and applicable for the variant customers' requirements. Today 7P's is widely used in customer services and stands for product, price, place, promotion, people, process, physical evidence. (Rafiq, 1995, 4-15)

In customer service business the first P, *Product*, does not need to be tangible. As described earlier in this chapter, good service provides value for the customer. In the taxi business the product can be regarded either as taxi service or a taxi ride. *Place* is the location, where the consumer can buy the product or service. Place also covers *how* the purchase is distributed to a specific place. Right timing and quantity are needed to succeed in this sector. The third of the original P's, *promotion*, covers all the communication ways from the company to its customers. In taxi services, promotion can be done via company's websites, social media, printed media, events and videos, among many others.

*Price* is the only factor in 7P's, which generates revenue for the company. Pricing positions the company to the marketplace. If a taxi operator charges more than the rivals, customers expect to gain better quality for the money. Existing customers are not as sensitive for higher pricing than new customers, however higher pricing should be justifiable.

The three later added factors, People, Physical evidence and Process, link the marketing mix closer to the customer service. As place covers the location of buying the service, physical evidence is the environment, where the service is provided. *Physical evidence* is the location, where the service provider and customer meet, in the taxi

business meaning the taxi car. *People* is probably the most important P that is influencing the customer service experience. People covers everyone having influence on the service satisfaction and bringing added value for a specific customer, who is choosing that service. People influence the service quality, its reputation as well as the consumer perceptions. People can provide significant amount of added value as well as acceptance for higher pricing. People who are involved in providing customer service, are important in every step from reserving or booking into providing service, reclamations, feedback and after sales.

Process covers each stage of the customer service. By intangible services process means the way a service is delivered. The set procedures and activity flow become really important compared to tangible products. The customer experience begins with recognizing the service provider, followed by an actual purchase and onward. The whole chain must work smoothly to be able to provide excellent customer service. In the taxi services, the process starts from finding the needed information for example from Google, booking the service, paying the service and possibly in the end feedback giving or reclamation processes. All the 7P's are compared to taxi services and gathered into Table 6 found at the next page. (Grădinaru 2016, 311-314; Levens 2014, 314; Marketing and the 7Ps: A brief summary of marketing and how it works.)

The customer service is a vital part of the customer experience. The overall service quality depends on both customers' experienced quality as well as on quality expectations. The expected quality is a sum of many different things, including marketing, brand, sales and communication efforts. By delivering great customer service in each of the 7P's factors, it is easier to deliver a great customer experience in the end. (Ahvenainen 2017, 15-69; Grönroos 2001, 104-106; Levens 2014, 308-317.)

Table 6. 7P's in the taxi services

7P'S	MEANING	CORRESPONDENCE IN TAXI SERVICES
Product	WHAT is provided?	Taxi ride, taxi service.
Price	WHICH price category?	Positions the taxi service provider in
		the marketplace. When there is higher
		price compared to the competitors –
		higher quality expectations.
Place	WHERE can the customer	Online booking, mobile applications,
	buy the service?	phone calls (dispatch centres or direct)
		etc.
Promotion	HOW service offerings are	Websites, social media, printed media,
	communicated?	videos etc.
People	WHO are the people in-	Customer support, booking central /
	volved in the service pro-	call centre, a taxi driver, a taxi opera-
	cess?	tor.
Process	WHAT is included in the	The entire process from choosing a taxi
	process and HOW does	service provider (information search-
	the whole process flow?	ing), booking the service, receiving con-
		firmation, receiving a taxi, the taxi ride
		in its entirety, arrival, payment, re-
		ceipt, possible feedback or reclamation
		handling.
Physical ev-	WHERE is the service pro-	Taxi car.
idence	vided?	

In certain businesses, customer service is far more important in building and holding a brand than solely concentrating on advertising messages would be. As a concept, brand is a *promise* to deliver benefits and value for a customer in a form of a service or a product. Brand exists in customers' minds. By keeping the brand promise, the band image will be solidified by its reputation and remain constant and strong against all possible difficulties. Airplane industry can somewhat be compared with

the taxi business as it is providing customer service and transport simultaneously. In an international research of brands, three to four airplane customers against one considered customer service to be more important for branding and returning to the same service provider than good marketing tactics were. In banking, customers are ten to twenty times more likely to return when the customer service is pleasant. As taxi service is deeper and more personal customer service than the airplane business is, the loyalty figures with the taxi service can be considered to be somewhere between the airplane and banking businesses. Good service strengthens the brand and builds customer trust and loyalty. Branded customer service is a true competitive advantage and a vital add on to the customer service concept. Brand is connected to both technical and functional aspects of the experienced quality. The quality of customer service either strengthens or reduces the service provider's image and brand. (Barlow & Stewart 2006, 14-50; Levens 2014, 131.)

#### 2.5.2 Customer value and satisfaction

By customer perceived value is meant the expected benefits, which a consumer assumes to receive, reduced by the expected total costs of the service or product. Usually the consumer aims to select a product or service that he or she thinks can offer the greatest value. By valuing higher quality, strong brand, many additional features or other benefits, the expected total costs are usually higher. There may be several other costs added to the purchasing cost, such as maintaining expenses or usage costs. When the altogether expected costs are high, the expected benefits must be great to be able to provide high perceived customer value. (Levens 2014, 78-80.)

Figure 7 clarifies the customer perceived value in the service business through the costs and performance quality. When the total costs of the service are high, the expected customer service and performance should be high-quality to maintain a fair consumer value. When looking at the service providers and brands B and E, the service costs are higher than the expected service quality. Brand C has a high perceived customer value by having great expected service performance with mediocre costs. The service performance benefits of Brand A are equal to its total costs. When a customer believes the brand D is worth of the additional costs and values the higher

performance that D provides, its additional costs compared to C or A are considered to be acceptable for this specific consumer. Brands A, C and D can be said to provide good value for the consumer. Which one the consumer prefers, depends on his or her own perceived and expected benefits. (Levens 2014, 79-80.)

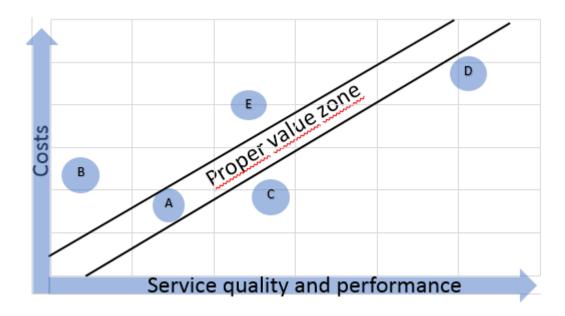


Figure 7. Consumer value map (Levens 2014, 80, modified)

Customer satisfaction comes from good customer service and successful customer experience. Overall customer experience consists of different kinds of encounter ways and is a sum of numerous different aspects. The purpose and goal of each customer encounter is to bring customer a positive, satisfied feeling. Customer satisfaction is a sum of each contact with a specific company: regardless of how the encounter occurs. Even though the customer service has been 100 % satisfying, however the website failed in searching more details or the phone service was non-professional, the overall customer satisfaction can remain below average. Each encounter, whether digital, unconscious brand-related or physical, influence the overall customer satisfaction and experience. Figure 8 illustrates these factors that are influencing the experienced service quality, as well as their relations to each other. (Ahvenainen 2017, 33-75.)

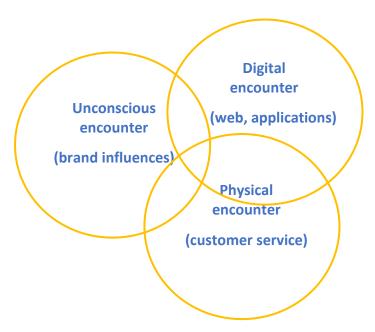


Figure 8. Experienced customer service quality (Ahvenainen 2017, 33-35, modified)

The customer's journey with a customer service company may lead through marketing, sales, services, invoicing, customer service, social media, reclamation and many others. A satisfied customer is loyal and may become a referee. An unsatisfied customer reduces or discontinues using the service in question. Negative experiences remain in customers' memories longer and effect customer loyalty. When a negative experience leads to reclamation, well-handled reclamation may even create greater customer satisfaction and loyalty. Service mistake is an opportunity to either strengthen the customer satisfaction and loyalty, or badly handled to lose the customer. Added to the whole customer experience chain, service mistake and reclamation handling are both central means in influencing customer satisfaction. (Ahvenainen 2017, 71; Järvinen, Grönroos, Liljander, Anttila, Ojasalo, Björk & Pietiläinen 2001, 96-99.)

#### 2.6 Theoretical Framework

The connection between the theoretical and empirical part is essential in a study.

The theoretical framework describes the theoretical understanding of the research phenomenon by placing the research phenomenon into the existing theories. The

theoretical framework gathers the most central theories around the research phenomenon and describes their connection to the empirical part of the research. (Kananen 2015, 32.) Based on the literature reviewed in chapter 2, it can be concluded that the taxi business in Finland is not widely studied and that there is insufficient data on the customer point of view. Customer service and customer satisfaction are defined, but how and whether the deregulated taxi market supports these, is unclear. There is no doubt how important a study on customer insight is. In Finland some theses regarding the taxi services, market deregulation and its effects have been written. There is available data and studies of the deregulation outcomes from other European countries, some slightly presenting the customer point of view as well. Additionally, there are statistics and calculations about the taxi market and it's the changes that have already occurred in Finland. Earlier theories and studies are used as a guideline to answer the research question as well as the two sub-questions.

# Consequences of the deregulation of the taxi services: insights from consumers in the Oulu region

As stated earlier, customer insight means deeper understanding of customer and marketplace needs. The main research problem was to investigate, what customers think, and how they see the taxi services in the liberalized market in Oulu. With the sub-questions, the research aimed for a deeper understanding of customer expectations and the market change outcomes. The research on the customer insight is the first step of a marketing process, as seen in Figure 6, starting from understanding the marketplace as well as customer needs and wants. Understanding customer insight leads to (see chapter 2.5.):

- ✓ Creating and adding customer value.
- ✓ Building and strengthening relationships.
- ✓ Improving and succeeding in business.
- ✓ Sustainable and profitable competitive advantages.
- ✓ Customer-oriented approach.

Taxi market deregulation can be divided into three groups: quantitative, qualitative and economic regulations (Hojnik 2018, 105-108). All of these are deregulated in Finland. Customers can experience quantitative deregulation as increased number of

taxi cars and taxi service providers. There were 9926 passenger cars subject to license usage in 2017, and by the end of Q3 in 2018 the number was 22 313. The number of taxi licenses has grown drastically likewise. (Kalustomarkkinat n.d.) Qualitative deregulation for entering the taxi business has led to increases in taxi licenses and taxi drivers' licenses. Research regarding the qualitative aspects after the deregulation had indicated the following (Holm 2018):

- ✓ Trust in taxis and taxi drivers strong with 83 % of the respondents.
- ✓ Trust in the taxi system weaker after the deregulation with 43 % of the respondents.
- ✓ Deregulation successful according to 18 % of the respondents.
- ✓ Deregulation a failure according to 44 % of the respondents.

Economic deregulation influenced price restrictions and first led to price reductions in Finland. This, however, changed soon after, and the taxi prices increased by 4.4 % when the prices of June 2018 were compared to the prices of December 2018 (Taksimatkojen kuluttajahintaindeksi 2016-2019). The same quantitative and economic effects have been noted elsewhere in the European countries which have deregulated their taxi markets. Uncertainty of using taxi services due to diverse pricing has been stated in Sweden and in the Netherlands. Removing the service obligation has influenced on taxi service availability in the rural areas. As a positive aspect, consumers can enjoy reduced waiting times mostly in the urban areas. The qualitative aspect is less researched.

#### What do taxi customers value with the taxi services?

Statistics Finland subcontracted Taksiliitto, the Finnish taxi alliance, with a study after the deregulation. According to the study, taxi usage and the purposes for use remained the same. Question "What do customers value with the taxi services?" was vaguely included in the taxi service study. The study (Holm, 2018) investigated reasons for choosing a specific taxi service provider. The most important reasons were:

- 1. Easiness of ordering.
- 2. Fast arrival.
- 3. Best price-quality relationship.
- 4. Driver's expertise.

These arguments are all features of qualitative, quantitative and economic aspects. The previous theses concerning the taxi market in Finland, written in Chapter 2.1.2., showed that customers value a good quality and customer service, trustworthy taxi services, driver's expertise and an overall vehicle cleanliness. The results indicated that there were no expectations or need for additional, special taxi services. As deregulation brought to the taxi companies the possibility for improving and widening the service supply, it is fair to ask whether there is a need for this or whether the customers value something else. Furthermore, we could ask what the expected benefits are that different customer segments value within the taxi services. Customer perceived value comes from the difference between the consumers' expected benefits and the total costs of the service. (Levens 2014, 78-80.)

#### What kind of outcomes has the taxi market liberation brought to the customers?

The outcomes that the Finnish Ministry for Transport and Communications is aiming for with the deregulation actions are as follows (HE 161/2016):

- √ developing digitalization
- ✓ increasing both services and jobs in the transport business
- ✓ increasing service demand (by creating a broader fleet)
- ✓ expanding the number of taxi entrepreneurs and drivers
- ✓ savings with decreased taxi prices
- ✓ improving the taxi service quality and availability.

As seen from the results in other countries, only some of these have occurred. With increased taxi quantity, reduced waiting times are resulted. Further, due to increased taxi quantities, fares have increased, and taxi utilization is decreasing. Nevertheless, there are no stated records of these being necessarily linked to decreasing service quality or vehicle standards. (Bekken 2005, 19-25.)

The present study has features of descriptive marketing research, aiming for describing phenomena, such as markets or consumer attitudes. (Kotler 2016, 105-122.) For OTAXI and other taxi dispatch centres and operators, the knowledge and understanding of customer behaviour and insight should be the basis of a proper marketing strategy and providing of customer value. As stated in chapter 2.5. and seen in Figure 6, understanding of customer insight is the key for succeeding in business and

capturing value from customers in return. The empirical part of the research combines customer insight with the taxi market, deregulation and the quality, quantity and economic effects from the customer point of view.

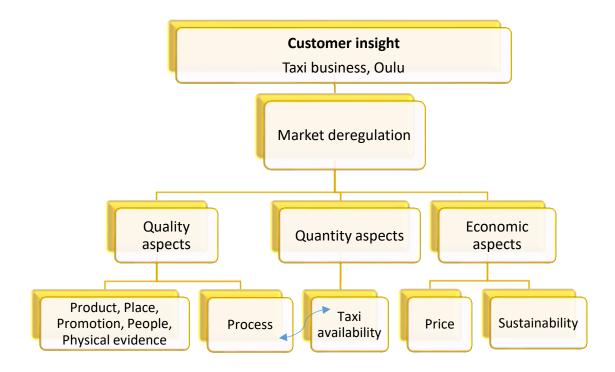


Figure 9. Theoretical framework

Figure 9 indicates the theoretical framework which was used as a guideline in the empirical study. Added to the customer insight of the deregulation outcomes regarding quantity, quality and economical aspects, customer expectations towards the 7P's of services could be formulated, as well as service value proposition for different customer segments. The P for Process can be both a quality and a quantity aspect, when speaking of the process flow and its fastness. The empirical study aimed to show that the targeted deregulation outcomes had been actualized.

# 3 Methodology

A research design is a framework that has been created to find answers to the research problem. A research design begins with a research problem and questions, leading the framework through justified methods for executing the research. (Kananen 2015, 85-93.) The purpose of this research was to study the customer insight, behaviour, expectations and needs towards taxi services in a liberalized market situation. The timing was convenient, since the market was liberalized a year ago.

The starting point and the fundament for the research was the taxi market that was seen as personal customer service. Assumptions towards the changed market situation are led from the statistics as well as the set objectives by the Finnish authorities in charge. The factors influencing consumer behaviour and decision making, as well as issues related to customer service and satisfaction, are defined in the literature review in chapter 2.

The theoretical part of the thesis guided all the chosen research methods. *Qualitative research* approach was chosen for gaining a more profound understanding of the changed market situation from a customer point of view. Commonly qualitative research aims at finding and revealing facts, and it is frequently used when markets change and when changing attitudes and behaviour require deeper understanding. Qualitative research does not aim to generalize but to explore more deeply, and it includes non-numerical information, such as notes, videos or interview transcripts. When a quantitative approach had been chosen, the research supply would have been more numeric and resulted in a more superficial understanding of the phenomenon. Qualitative research was also reasonable, as there was no information or precise research on the current competitive taxi market phenomenon in Finland. Qualitative research is not as theory-related as quantitative research, rather it aims for creating theories. The research target was adequate, and the qualitative approach was strengthened by choosing interviews as data collection method. (Johnson & Christensen 2008, 34; Kananen 2015, 66-71; Levens 2014, 111.)

In order to study the main research problem as well as the sub-questions, the literature review and theoretical framework were used as a guideline in the interview questionnaire. Semi-structured interviews were chosen to gain structured and certain outcomes with the possibility to search deeper with additional questions. In order to analyse the phenomenon through both literature and primary data with the most suitable method, a *theory assisted approach* was used for the data analysis. In the following chapter OTAXI Oulu, the most traditional taxi dispatch centre in the Oulu region, is introduced as a significant part of the research context. OTAXI Oulu was chosen due to market perception: for familiarizing with the details and issues in the market and to comparing the research results to practice. The research design is completed with data collection and analysis methods as well as the issues of validity and reliability.

## 3.1 Research context

The results of the empirical part of the thesis will in the end be mirrored into Oulun Aluetaksi Oy's taxi services and operations. The taxi dispatch business has started in Oulu region already in 1967. The taxi union was in operation until Oulun Aluetaksi Oy was established in 1990. Oulun Aluetaksi Oy is 100 % taxi entrepreneurs owned company. Several office employees work at the dispatch centre in Oulu. The taxi dispatch call-centre, booking central, is outsourced and run 24/7 by Sentraali in Kajaani.

Previously taxi cars driving under Oulun Aluetaksi Oy dispatch were just like every other Finnish taxi car that were differently coloured and possibly taped with paid advertisements. The dispatch centre started planning a taxi brand later in the year 2016. The future was known to bring changes and a strong brand was regarded as a strengthening force and a shelter for the coming market liberation. The brand was developed in cooperation with the brand design studio Brandstein, Oulun Aluetaksi Oy board and CEO of that time. OTAXI car colouring is the most visual part of the brand and it is recognized and spotted widely. There are two OTAXI taxi car colours: black or white based colouring mixed with yellow, all with similar OTAXI taping as seen in one of the official brand pictures in Figure 10. As stated in chapter 2.5.1., strong brand combined with a good customer service is a firm competitive advantage.



Figure 10. Branded and taped OTAXI taxis

In 2017, Pohjanmaan Taksi Oy and KuRu-Taksi Oy joined OTAXI brand and begun operations in their own dispatch areas, as individual taxi dispatch centres. At OTAXI Oulu area, there are around two hundred taxi entrepreneurs, hundreds of taxi drivers and over 300 taxi cars. Altogether, around 600 cars and roughly thousand taxi drivers are driving under the OTAXI brand. To be able to drive under OTAXI dispatch, each driver must participate a brand training. OTAXI cars are available in the following cities and towns: Alavieska, Haapajärvi, Haapavesi, Hailuoto, Haukipudas, Ii, Kalajoki, Kempele, Kiiminki, Kuusamo and Ruka, Kärsämäki, Liminka, Lumijoki, Merijärvi, Muhos, Nivala, Oulainen, Oulu, Oulunsalo, Pudasjärvi, Pyhäjoki, Pyhäjärvi, Pyhäntä, Raahe, Reisjärvi, Ruukki, Sievi, Siikajoki, Siikalatva, Taivalkoski, Temmes, Tyrnävä, Utajärvi, Vaala, Vihanti, Ylivieska and Yli-Ii. Even though the deregulation removed the obligation to follow certain service times, in these regions, OTAXI aims for 24/7 service promise year around.

The brand promise is divided in four sections: 1. quality service concept, 2. driver clothing, 3. taped taxi car and 4. clean car. Quality service concept is the most important one, however all of these are required when driving for OTAXI fleet. The

clothing selection has been picked up carefully with OTAXI brand colours and mark-ups. The selection is wide, including clothes both for women and men, summertime and winter. The clothes must be clean and worn respectfully. OTAXI car must be taped according to the brand rules and the car must be clean, without any disruptive noises or smells. There are specific, exact places for car advertisement tapes. Advertisement of politics or religion is not allowed. The service promise is a guarantee for quality: service must be professional, reliable and polite.

To assure and to control that the brand demands are followed correctly, a brand team is formed yearly with a certain number of members from each OTAXI company. A brand meeting is organized at least three times a year. The brand team consists of members from Oulun Aluetaksi, KuRu Taksi and Pohjanmaan Taksi. Additionally, each company has their own quality team that organizes meetings regularly. Quality teams are supervising the set quality, traffic behaviour and customer service in the field. As Oulu is seen as a large operational area, OTAXI Oulu quality team consist of four members and the team has weekly meetings. Each negative and positive customer feedback is handled by the local quality team. The quality team will give feedback or take actions against the taxi driver involved in the feedback, dependent on the case in question.

## 3.2 Data collection method

The research approach of this study was based on qualitative data. Using interviews for information collecting was an efficient and practical choice when requiring deep consumer insight. Another reason for choosing interviews for data collection method was the aim to study the phenomenon, its effects and outcomes, closer and deeper. The research aimed for customer insight and for this, data was collected from semi-structured interviews. Guided, semi-structured interviews allowed a researcher to restrict in a chosen topic and themes but inset additional questions during the interview for getting more in-depth responses. Therefore, additionally to primary questions, some secondary questions for elaborating an answer, were asked. Primary

questions are seen in Appendix 1. When researching a phenomenon, semi-structured interview was a well-argued choice. (Eriksson & Kovalainen 2008, 2-12.)

Different research questions require different types of interview questions, which can be divided into research approaches called positivist, emotionalist and constructionist. When exploring the Silverman's three study-types of interviewing from 2001 (Eriksson & Kovalainen 2008, 5-6.), emotionalist and constructionist interview approaches were selected for the research. With *emotionalist* approach, questions focus on interviewees viewpoints, perceptions and emotions. The authentic experience was needed for understanding the customer insight and experiencing the phenomenon. Constructionist approach concentrate on the interaction between researcher (interviewer) and interviewee. The focus is in meaning and how meanings are gained through the interaction. When combining these two approaches, there was a good vary in wording and question layout. Both "what" and "how" questions were used for providing a profound understanding and deeper interview results through question settings and discussions. (ibid., 2-12.)

In a qualitative research, interviewees should be chosen carefully for their relevancy and knowledge of the phenomenon (Kananen 2017, 127). For the present study's interviews, people from different customer segments were chosen. The interviewees were chosen either due to his or her taxi usage manners or his/her wider insight on the current taxi phenomenon. Each of the interviewees either used taxi services regularly or interacted continuously with customers using taxi services. Hotel employees were chosen for their wide understanding of different customer needs, opinions and usage manners regarding the taxi services. Employee of international company in Oulu was chosen for the knowledge of regular business travelling. Residents from eldercare were chosen for getting insight of elderly customers' requirements. Additionally, customers using the Kela and MYK rides were included. Since the nature of the study was gaining insight from consumers who had some knowledge of the business and used taxi services somewhat regularly, no need for interviewing students or youth were seen. For the same rationalization no consumers, which used taxi services very rarely, were chosen for the interviews. The usage of native language generally gives the best insight from the interviewees and therefore the interviews were done in Finnish language. Altogether, nine people were interviewed for the research,

as defined in Table 7. To ensure interviewee trust and sincerity of the interviews, interviewee names are not published. Dependent on the interviewee, an interview duration was between 40 and 60 minutes.

Table 7. The chosen interviewees

Research coding	Background	Age range	Interview
H1	Business traveller, works	30-35 years	05-2019
	in an international com-		
	pany in Oulu		
H2	Young social worker, enti-	30-35 years	05-2019
	tled to the MYK rides (vis-		
	ual impairment)		
H3	Hotel employee, manage-	40-45 years	05-2019
	ment level		
H4	Hotel employee, reception	35-40 years	06-2019
	management level		
H5	Employer at The Alz-	45-50 years	05-2019
	heimer Society of Finland		
	/ The National Memory		
	Programme		
H6	Senior at eldercare, enti-	65+ years	05-2019
	tled to the MYK rides		
H7	Senior at eldercare, enti-	65+ years	05-2019
	tled to the MYK rides		
H8	Young senior at eldercare,	50+ years	05-2019
	entitled to the MYK rides		
	(CP disability)		
H9	Entrepreneur, using both	40+ years	06-2019
	MYK and Kela rides		

The semi-structured interviews took place in a specific time horizon during May and June 2019. Questions were formulated to follow the research literature review and the current taxi phenomenon. All the used questions were open-ended, giving the interviewee an opportunity to provide detailed answers, which can be formulated with own words. Direct questions were used instead of indirect ones, to produce more discussion from a relevant field. For avoiding pre-assumptions and unnoticed directing of an interviewee to a specific direction, all the questions were carefully formulated to be neutral. (Eriksson & Kovalainen 2008, 8-12.)

The interview questions consisted of themes and theories discussed in the literature review in the chapter 2. The insight of customer service, changed market situation as well as themes according to the 7 P's, were inquired with different kind of question formulations. Semi-structured interviewing allowed to concentrate more focused on the convenient themes, passing the ones that were not relevant for a specific interviewee. Non-relevant themes when interviewing consumers using the MYK or Kela rides were for example the ones concerning the choice of a service provider, due to the service provider is set by the payer according to a competitive tendering and not by the consumer.

## 3.3 Data analysis process

The gathered data can be analysed using different kind of methods and processes, all aiming for reliable, valid research results. Inductive approach begins from practice and specific observations, moving into understanding and broader generalizations or theories. (Kananen 2015, 66-68.) "A theory is a description of a pattern that you find in the data" (Auerbach & Silverstein 2003, 35). Deductive reasoning, on contrary, moves from general rule or theory into a specific conclusion. (Kananen 2015, 66-68.) Both approaches are criticized by certain researchers. Abductive reasoning is set to confront these found weaknesses in the inductive and deductive approaches. Abductive reasoning starts with incomplete observations and aims for the best prediction

in the matter. In an abductive research, explanations for found observations or surprising facts are searched for and this may in the end also lead to formulating a theory. (Abductive reasoning, n.d.; Tuomi & Sarajärvi 2018, 80.)

Due to the nature of the study and due to the above mentioned diverse and disputed approach opinions, content analysis was chosen as the main analysis method. Tuomi and Sarajärvi (2018) present three different approaches for content analysis: content-based, theory-based, and theory assisted. In these, the factors guiding the analyse-making can be better taken into consideration than in the inductive or deductive approaches. Content-based analysis aims for creating theoretical entirety from the research material. Theory-based, as name indicates, is based on a theory or model, which guides the data collection and its analysis. (ibid., 80-81.) In this research, theory assisted analysis was used. In theory assisted analysis, theory is used in guiding the analysing process. The influence of earlier literature can be identified from the analysis, but these are not used to test a theory but to create new ideas and directions. In the theory assisted analysing process, literature and theories are both considered and combined. Therefore, the research resembles theory elaboration – abduction, whereas the incomplete observations risen from the taxi market are researched deeper with interviews and analysed. Interview questions were based on the literature and associated theories, and especially the theory of 7 P's of services was used in the analysis. (ibid., 80-81)

Content analysis was used according to the procedure presented in Figure 11 below. The interviews were transcribed from the recordings into the Word format. In the transcription standard language was used, and the dialects were transformed into standard Finnish language. (Kananen 2017, 135). The interviews were read repeatedly for finding and underlining the most relevant phrases and parts. The data was carefully gone through to separate the relevant data from the irrelevant data. To retain the validity of the research, merely the data that was not concerning the research and the research questions, was excluded. After reducing the data, phrases were organized according to the pre-planned themes risen from the theory and translated into English language. After grouping and coding, the interviews were compared for finding similarities. Finally, similarities were compared to identify up-

per classes and to detect differences. (Auerbach, Silverstein 2003, 35-36; Tuomi & Sarajärvi 2018, 89-92; Silverman 2005; 210-211.)

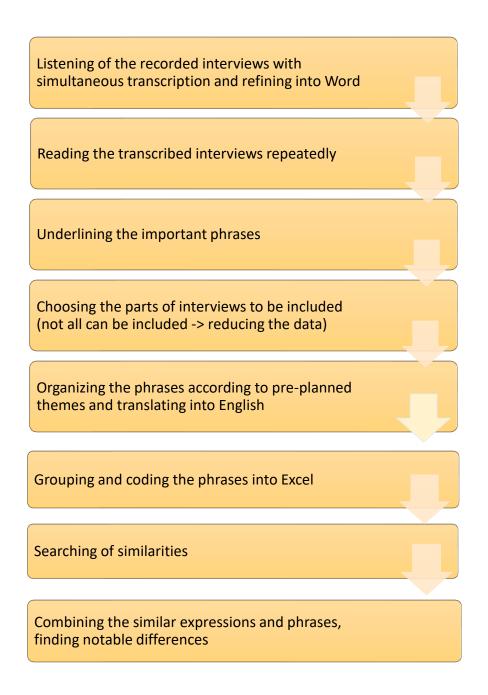


Figure 11. Content analysis process (Tuomi & Sarajärvi 2018; 89-92, modified)

Data saturation occurs, when collecting new data will not bring any additional comprehension on the research problem. For detecting the saturation point correctly, the data analysis was done simultaneously with the data collection during the empirical part of the research. (Kananen 2017, 71 & 128.)

## 3.4 Verification of the findings

Validity is the truth of the research. Validity interprets that the research was made accurately and truthfully. With validity the researcher demonstrates that the research responds to the set research questions. Especially in a qualitative research it is important to convince that the findings are coming from critical investigations gathered from the entire data and not just selected examples. (Silverman 2005, 210-212.) During this research, validity was cherished with keeping the research purpose in mind and finding the answers centralized to the research problem as well as the set research questions. Analysing the interview transcripts with pre-set themes, ensured the correct focus on the research problem. Data was reduced only by excluding parts of the interviews, which included discussions outside the research topics.

By reliability is meant the consistency, when the research is done by another researcher or on a different occasion. With other words, reliability is the level of how repeatable the research is. Reliability shows the ability to give non-coincidental results. In other words, how repeatable the research is if done by another researcher or on different occasion. This research is valid in a certain time and location, meaning concentration to Oulu region approximately one year after the taxi market deregulation. The research is repeatable but can have an effect with the chosen interviewees. If only consumers using taxi services extremely rarely were chosen, results could differ to some extent. For this research, interviewees were chosen carefully for their comprehensive or diverse taxi service usage habits. (Vilkka 2007, 149-154; Tuomi & Sarajärvi 2018, 118-119).

Reliability during the interviews was assured with recording the interviews. The recording equipment was tested before each interview and two recorders were used to eliminate problems of recorder getting broken during an interview. The permission

was given from each interviewee. (Eriksson & Kovalainen 2008, 12-13.) Internal consistency is important in evaluating research reliability. There is a clear consistency between research purpose and target, research questions, theoretical framework, methodology and research results in the research through the whole study. (Tuomi & Sarajärvi 2018, 121-122.)

Even though Kananen (2017) states that certain researchers consider it to be impossible to find one and only objective research result with qualitative research, this is considered and aimed to success in objectivity as pedantic as possible. Subjectivity was carefully considered and observed, due the researcher was working in the taxi dispatch centre, OTAXI Oulu. To ensure subjectivity and objectivity of the research, special care for excluding the researcher from OTAXI title during the research was noted. The interviews were executed as an individual researcher, not as an employee at OTAXI. The researcher did not discuss any work-related issues before or during the interviews. Internal validity was considered, and the researcher did not express own opinions during the interviews. (ibid., 80.)

In a qualitative research, adequate number of interviewees is not explicit. Instead of concentrating on a specific size of the material, more important is to concentrate on the interpretation. Interpretation of the material must be strong in durability and depth. Added to this, material should be received from interviewees, who know the phenomenon as profound as possible, or have own long experience of the phenomenon in question. (Tuominen & Sarajärvi 2018, 73-75.)

Triangulation stands for using two or several different approaches when researching a question or a problem. Triangulation increases objectivity and improves both reliability and validity. Triangulation can be accomplished with the use of several data sources, research methods, research designs or research theories. Triangulation confirms proposed findings as well as completeness of the collected data. The earlier written theses, studies and data were used as a second data source for investigating the present research problem. In the research, only reliable secondary data was used. The collected data was analysed with theory assisted analysis, combining both theory and interview results in the analysing process. The usage of several reliable sources and data analysing angles increases the research objectivity. (Heale & Forbes 2013, Kananen 2017, 155.)

## 4 Research results

Research results are solutions coming from the collected data and they are being add-ons to the existing literature. Important is how the results are found and decoded from the data. (Kananen 2019, 143-149.) In this research, recurring stories and similar experiences and explanations of the current taxi market situation were looked for. As the research approach was qualitative and theory assisted, the purpose of the results was not to create numerical statistics. How many times one word was mentioned during the interviews, was irrelevant.

The next subchapters provide deep insights from the interviewed persons of the research phenomenon. At first, the research results are reviewed and introduced according to the pre-planned themes which follow the theoretical framework presented in chapter 2.6. The most relevant parts of each interview were organized into the themes of qualitative, quantitative and economic aspects as well as issues related to the situation before and after the deregulation. Appendix 2 shows an example of one interview, where the relevant phrases found were organized according to the set themes, and further analysed and coded. Each interview was analysed equally. After analysing the results according to the set themes, results are regarded in the light of the research problem and the set research questions. In each, similarities are looked for and compared, not forgetting the differences found.

Besides the set themes, the interviews were viewed in their entirety, as important phrases were underlined from the transcribed interviews. Based on the underlining, four broad themes emerged clearly from the data. These identified themes were customer service, reliability, availability and changes compared to the earlier market situation.

## 4.1 Qualitative, quantitative and economic aspects

Qualitative, quantitative and economic aspects, including the 7 P's of services, were easily detected in the interview transcriptions. Divided into set themes, the coded results of each interview were combined in one Excel table. The results, following the guideline of the theoretical framework, are presented below.

## 4.1.1 Matters of quality

In the 7 P's of services, Product, Physical evidence, People, Place and Process are all included in the quality aspect of the taxi service. Product as well as People emerged most in the discussions. The Product, being the taxi service and its purpose, led to profound speculations among the interviewees.

#### **Product**

A common view among the interviewees was that taxi service was *a service*: it was either described, seen or needed as a personal service, thoughtful customer service, smooth customer service or customer experience by all of the interviewees. Reliability of the service was regarded extremely high and mentioned in some point of each interview. All the phrases, where the taxi service as a product was mentioned, were coded for reducing the data and for comparing the results. Table 8 shows all these coded results. Interviewee H8 did not mention taxi service as a product at any point of the interview.

When analysing the results, two themes can be identified in the coded answers. Issues related to the taxi service as a service are seen in green, and issues related to trustworthiness of the service are seen in blue.

Table 8. Results related to the taxi service

H1	H2	Н3	H4	H5	Н6	H7	Н9
Service	Service	Comfortable	Reliable	Reliability, timing	Thoughtful customer service	Availability	Local knowledge -> service quality
Service	No extras needed	Bicycle carrier	Helsinki image -	Personal service	Thoughtful customer service	Thoughtful customer service	Quality for differentia- tion and trust
Life-easing	Fluent cus- tomer ser- vice	Certainty of arrival	Carrying bags	Emergency assistance	Customer experience	Customer service	Premium unneeded
Life-easing	Customer ex- perience	Positive feel- ing	Reliable	Traffic behaviour	Extra service		Quality: reliability and fluency
	Availability		Failure -> Explanation	Local knowledge	Customer service		Education +
	Customer service		Fragile trust	Reliable	Brand reliability		Fluency over premium
		•	Reliability - recommen- dation	Significance	Reliability		
			Interest in functionality			•	
			Purposely longer route -				
			Visible lack of local knowledge				

The interviewees see and expect the taxi service to be reliable. The taxi service is seen reliable when its availability is assured. Timing and certainty of arrival are associated strongly with availability. For the newcomers, trust is more challenging to build, and reliability should be firm in order to be able to compete with the taxi operators that have been operating longer in the area.

"After the experience in Helsinki, I couldn't even think of any cooperation with the company even in Oulu." (Interviewee H4.)

When an interviewee mentioned an occurred failure during the service process, these were however not seen as unacceptable but ones needing immediate handling and an explanation.

It is important that a customer can give customer feedback. This should also be significant for the service provider. (Interviewee H2.)

"If it's not working, there must really be a reason, and I need to know why." (Interviewee H4.)

Three of the interviewees mentioned specifically Helsinki as not being trustworthy in the taxi services anymore. With regard to quality, neither of the interviewees expected premium. Instead, reliability and smooth driving were seen more important. Smoothness meant well-chosen routes and comfortable rides. Choosing a longer route on purpose was said to be unacceptable and even cheating according to two of the interviewees. Interviewees working at hotels only recommend their customers those taxi operators, whom they regarded to be reliable.

Taxi service as a Product was seen clearly as a personal service. Elderly interviewees looked back and told long stories of specific friendly drivers: they remembered shared conversations and trips done with the drivers and even told of receiving small presents by the Christmas time. The consumers using the MYK rides were earlier entitled to familiar taxi drivers. The interviewees explained that the taxi drivers had remembered and known the passengers by name, known the addresses, habits and wishes of the passengers. The elderly expected assistance with the issues related to the need of the taxi service, like helping with moving, stopping for a toilet, shopping and carrying bags.

In the Oulu area, an interviewee thanked the taxi business for the assistance with emergency situations, when a police calls a person to be missing. Only groceries and bicycle carrier were mentioned as conceivable extra services, otherwise taxi service was seen solely as a personal service not needing any premium or extras. One interviewee mentioned high quality to be unnecessary but understood its purpose to differentiate from the others and to grow trust. For people with special needs a comprehensive and reliable service was seen essential according to each of the interviewees. Additionally, education and local knowledge were mentioned to be relevant part of the service by every interviewee.

## **Physical evidence**

When divided into elderly interviewees and interviewees at working life, the consumers at working life were more demanding of the car needs than the elderly people.

For the pensioners a taxi car was enough when being "normal" or "good". For the

employees working at hotels, car model and type was personally insignificant. However, the hotel employees mentioned a car to play an important role for some of the customers, especially businesspeople and foreigners.

For a lot of customers, the car does matter, which I find funny, but of course it's an opinion. (Interviewee H4.)

Adjectives "clean", "new" and "branded / taped" were the actors showing up several times in the results. The significance of a taped and branded car was notable, as it was associated with a well-known taxi operator. Interviewee H5 mentioned hybrid cars that had been in the discussions at home and assumingly becoming a trend and their choice in the future. Altogether, adjectives and related words mentioned to describe the Physical evidence during all the interviews were:

"traditional, brand, clean, new, not-just-a-ride, indifference, insignificant, matters for customers, brand image, taped, functional, safe, roomy, ecological, tidy, good, normal".

#### **People**

When discussing of People being part of the taxi service, discussions during the interviews moved regularly from the time before the deregulation to the time after the deregulation by comparing these two. Each of the interviewees saw the taxi driver's occupation to be customer service. In each interview, education was seen important at least at some level. Lack of education was seen concerning, lowering either service quality, safety or reliability.

I wonder when it's no longer regulated and anyone can be a taxi driver or entrepreneur now... it has a safety aspect in it. (Interviewee 1.)

Table 9 shows the coded interview results when discussed of People involved in the taxi business. All the results concerning customer service or overall customer experience are marked in blue. All the discussions regarding education or local knowledge are marked in green. The table shows how important part both customer service and

education played, when there were discussions of People involved. From all the persons involved in the taxi business, taxi driver was regarded as the most meaningful part of the service process.

Table 9. Results related to people involved

H1	H2	Н3	H4	Н5	Н6	H7	Н8	Н9
Safety concerns	Customer experience	Customer service, safety	Newcomers ruining repu- tation	Safety	Uncertainty	Reliability	Customer service	Education +
Local knowledge	Education: customer service	Education: customer service	Carrying bags!	Safety	Uncertainty	Good drivers	Customer service	Honesty +
Customer service	Local knowledge	Customers' terms	Local knowledge+	Customer service	Customer service	Customer service	Customer service	Lack of local knowledge
Education: responsibility	First impres- sion -> over- all service satisfaction	Local knowledge	Education -> various driv- ers -> Reliability	Behaviour	Customer service	Customer service	Local knowledge	Safety, "feel- ing of secure"
Local knowledge	Customer satisfaction-> reclamations	Listening	Customer service, local knowledge	Knowledge of human na- ture	Communica- tion	Customer ex- perience	Education - local knowledge	Education: driver and customer advantage
Reliable			Calm	Language skills	Personal ser- vice	Good drivers		Frustration
Knowledge of human nature			Customer service+	Education - confronting people	Education - first aid - hu- mans	Local knowledge		
	•		Reclamation handling+	Education - diseases	Personal service	Personal ser- vice -> customer experience		
				Thoughtful customer service	Local knowledge	Simple cus- tomer ser- vice		
				Customer service				
				Customer service				

For the elderly people, taxi driver's personal service with its small nuances like remembering a customers' name or stopping for a toilet, was clearly important. Familiar drivers were missed. Otherwise, a driver was seen to be good by being "normal". The interviewees in working life did not need a taxi driver's service to be as personal as the pensioners wanted. Polite customer service was regarded as most important. Stepping out of the car, greeting, helping with the bags, opening the door, being friendly and polite, having ability to read people for their willingness to talk, listening, driving smoothly but safely and knowing the route, were considered as good driver's qualities. Some of the interviewees mentioned these qualities not to be always self-evident. Especially stepping out of the car, opening the door and helping with the

bags had not always occurred. Nothing special was wished for, simple and polite customer service was seen satisfactory.

A good taxi driver talks with the customer at customer terms, when the customer wishes. Not like "I just talk and talk when I finally get a customer". And the driving should be at customer terms as well, not just driving extra cycle around the city. Sometimes it feels that safety is not a concern for the drivers. This should always be at customer terms. (Interviewee H3.)

When speaking of people with special needs, many interviewees mentioned driver's responsibility and special skills for serving correctly. When confronting different kind of people, the profession was seen challenging and therefore needing education and guidance. Especially challenging interviewee H5 mentioned customers with memory-related diseases.

For taxi drivers' profession should be selected persons, who know how to confront people and understand the person despite of all kind of medical challenges. But I believe, people who can confront people correctly, are being selected for the profession. (Interviewee H5.)

Revealed and valued taxi driver qualities altogether were:

- customer servant: stepping out of the car, greeting, helping with the bags, opening the door
- having an ability to read people for their willingness to talk
- knowledge of human nature
- good listener
- normal
- friendly and polite
- driving smoothly but safely and knowing the route
- educated for the profession
- willing to confront different kind of people
- knowledge of the first aid and different diseases

- brings feeling of safety: calm, reliable
- local knowledge
- driving on customers' terms.

..he had been driving a taxi for over 40 years, and he just told he had a navigator in his head. Kind of a small thing, but it just brought me that kind of a feeling that it's safe for me to sit on the back seat when there is a guy on the front seat who knows where he's going. And if there would have been something unexpected during the ride, you kind of forgive. (Interviewee H9.)

When asked of the possible reasons for changing a service provider, a taxi driver had an impact on each of the reasons except for the availability. The mentioned reasons were cheating on pricing or driving through a longer route, dishonesty, rude behaviour or continuous availability or reliability issues. Lack of local knowledge caused uncertainty of the service reliability among pensioners, and younger employees got irritated of this.

When the base education is low you should first educate better, so that the drivers wouldn't get sick of customers' complaints and change jobs. That would be an interest of both sides. It is nicer to drive when you know a bit of something, and customer is satisfied, when the most suitable route has been chosen. (Interviewee H9.)

Exactly local knowledge. People ask for tips from the taxi driver and the presumption is that they know the city and places. And if there is no local knowledge... I think it would be good due to correct routes and other knowledge. (Interviewee H4.)

Taxi driver's education was associated with many things during the interviews: reliability, safety, customer service, confronting people, confronting different medical challenges as well as disabilities, first aid and most of all local knowledge. Several interviewees stated that the lack of education had effected local knowledge and customer service in a negative way. Interviewee H9 stated that the lack of local knowledge was already seen in service generation. Solely driving as navigator advices

was seen lacking true local knowledge. Interviewee H4 mentioned fighting that had been occurred between the taxi drivers and understanding their side to see it as unfair that a taxi driver with 40 years of experience was suddenly at a same level with a group of fresh newcomers. Two of the interviewees saw the lowering of entry level to be a possibility for foreigners to begin taxi driving. This was already seen happening in the Oulu area.

#### Place and process

Each of the interviewees made a taxi reservation at least in some cases by calling. Especially when a taxi was pre-ordered, calling was used. At the hotels, where two of the interviewees worked, pre-orders were always made by calling. When reliability was needed, business travellers made the taxi orders by calling as well. Business traveller H1 used Google for finding a local taxi during the business trips and chose the first one from Google when there was no number for a local taxi saved on the phone. Two of the interviewees mentioned that a strong, known brand had influenced the choice of the service provider. When pre-ordering was mentioned among the interviewees, either certainty of arrival or an airport ride was associated with the pre-order call. The MYK rides had to be ordered by calling the dispatch centre.

Interviewee H5 used calling for pre-orders but explained to catch a taxi from a taxi stand when she was not in a hurry, or when she landed to an airport at daytime or early evening. Younger interviewees at working life used mobile applications for the taxi orders. Additionally, employees at the hotels had other digital ordering methods, like Taxi Butler, at the reception. Taxi Butler was explained to be a button that enabled taxi ordering without having the need to hang on the phone in the reception while serving customers. At leisure time, each of the interviewee who were not using the MYK rides or not using them solely, had tried one or several taxi mobile applications.

For purchasing Process, comparing of prices was mentioned to be frustratingly difficult by one interviewee. Others had not compared prices at all. Service process flow for the MYK service users was seen as frustrating, difficult and unfair. Ordering a MYK taxi was described to be time-consuming and receiving of taxi uncertain. A smooth,

reliable process flow and correct timing was appreciated by each of the interviewees and the availability was mentioned several times. Availability and reliability were regarded to influence one-another. Challenging process flow, especially for people with memory-related diseases, elderly, and those with special needs, was seen extremely unfair and unacceptable. The passengers using the MYK rides were not able choose the service provider and each of the MYK travellers saw the disability to do so as unfair.

I can only call a taxi from MYK centre and it's so difficult. They don't answer, too little personnel or whatever I do not know. I must wait for 15 minutes and if they do not answer, I can call the company who won the tendering. I guess they drive so cheap, I guess that's the reason, I do not know. (Interviewee H7.)

As a grown woman, you shouldn't have to wait for hours for a taxi, and I find it difficult to predict in advance, when I want to travel back. (Interviewee H6).

Hotel employees H3 and H4 explained business travellers to trust the hotel employees to recommend and provide a taxi operator, which they found reliable. Business travellers had a habit and trust for the taxi business and chose the first taxi at sight, when a hotel had not recommended a specific taxi operator.

> If I would use unsuccessfully a newcomer, that would be also the last time. Otherwise I don't put in too much effort when choosing the service provider. (Interviewee H1.)

> There are no reasons for choosing a service provider, I just take the first one, which comes. No matter whatsoever, which one. (Interviewee H3.)

For a smooth process flow and service, local knowledge was seen important among each of the interviewees. Lack of local knowledge was mentioned and experienced by several. Especially in Helsinki, the taxi service reliability was decreased due to the lack of local knowledge and mentioned by three of the interviewees. Navigators were admitted being helpful but not being able to assist when there is a need for the most suitable route. Interviewee H5 mentioned that a fluent service required a true local

knowledge during rush-hours and bigger events, or in case of construction works and ever-changing roadblocks.

Local knowledge is when you can choose handy routes without getting stuck into a traffic jam for a long time. Local knowledge is useful in bigger places. (Interviewee H5.)

In a way I think that the core of the taxi business is to transfer the customer from A to B. That should be something that succeeds no matter what. (Interviewee H9.)

The drivers' lack of local knowledge was seen problematic especially with people with special needs, who could not give instructions of the route. For a smooth process flow and reliability, choosing a longer route was seen unforgivable by two of the interviewees.

#### Promotion

Promotion was not greatly noticed in the Oulu area, however two interviewees had noticed taxi advertisement in the Helsinki area. Whether some promotion was noted in the Oulu area, this was through social media or cooperation contacts received from hotel employees. Additionally, advertisement in the taxi car surfaces was noticed by interviewee H9. Overall, the interviewees were not enthusiastic about promotion issues, even though some taxi application notifications at social media were recognized. The overall opinion was that not much if any taxi-related advertisement was visible in the Oulu region, nor it was asked for. Branded and taped cars were noted but not regarded as promotion.

#### 4.1.2 Quantity aspect

The taxi availability was seen problematic in each but one of the interviews. As seen in Table 10, all the interviewees using the MYK rides stated the availability to be worse than before the deregulation. The reasons were speculated to be in competitive tendering, saving money, insufficient number of taxi cars, lack of resources or

lack of personnel. The elderly interviewees who were living in the care home were already giving up and two out of three had simply stopped using the taxi services. Bitterness was clear in the MYK users' answers. Interviewees H2 and H9 used the MYK rides as well as other operators when they were on leisure or travelling. When there was a possibility to choose, they ordered a taxi from the taxi operators that had better availability than the chosen MYK service provider. The pensioners sometimes ordered a normal taxi, however they explained it to be too expensive without the given compensations. The coded answers in Table 10 are marked in red for their positivity, blue for negativity or green for neutrality.

Table 10. Taxi availability

H1	H2	Н3	H4	H5	Н6	Н7	Н8	Н9
No changes	Availability -	More smooth	Rush hours -	Reliability -	Uncertainty, giving up	Bitter	Availability +/-	Various cars, quantity in- creased
Faster availa- bility?	Availability - reliability	Availability +/-	Variable need -> availability	Unawareness		Availability -	Availability -	Lacking re- sources
Rural availa- bility?		Disabled -	Availability - pre-order	Brand		Availability -		Availability -
			Car increase - availability-	Needless on call duty				Availability - profitable ar- eas
				Increased dis- cussions				
				Timing -				
				Availability at taxi stands +				

Interviewee and business traveller H1 had not noticed any changes with the availability. Solely interviewee H3 mentioned getting a taxi to be easier on leisure time than before. Two of the interviewees mentioned taxi stands to have more cars than before. However, the hotel employee H4 wondered how the availability can be decreased even when the taxi car numbers have increased. Rush hours were seen problematic at the hotels in question, and the situation had not changed after the deregulation. Interviewee H4 stated it to be understandable that for one short demand peak, there could not be endless numbers of cars. Providing and promising certainty of arrival and correct timing for businesspeople and people travelling to the airport, was seen problematic. Overall correct timing and reliability were mentioned to be

the main concerns in the availability. There were also discussions with two interviewees of the media writings and consumer complaints of the taxi availability in the Oulu area.

I guess that renovation makes people talk, and it's hard to say truthfully and with fact why these issues are discussed so much. Is the change in availability due to deregulation or because of people talking and telling more now when this subject is on surface? (Interviewee H5.)

Each of the interviewees had noticed that there were different kind of taxi cars in the Oulu area. Neither of the interviewees had knowledge of the current availability in the rural areas, however three of them were interested of knowing, how the availability was. Interviewee H5 understood the taxi drivers' frustration on rural areas at night times when there were no rides at all. Interviewee H9 mentioned it also to be understandable that taxi cars focused on areas where the customers were.

#### 4.1.3 Economic-related issues

In this research both price and sustainability were regarded as economic aspects of the taxi services. Consumers using the MYK rides did not need to compare prices, while prices were set. In Kela rides, the set deductible amount was paid at most.

Business travellers were not very sensitive or pedantic of the taxi fares. Interviewee H1 admitted of having a blind trust and acted as before the deregulation, meaning not comparing or asking for taxi fares. When the company was paying for the trip the pricing was not thought over. Only rarely customers asked for taxi prices from a hotel reception, more they were interested in which taxi operator was reliable and which one the receptionist recommended in the area.

I kind of still can not think that in Finland one should ask for a pricing when getting into a taxi. (Interviewee H1.)

More people are interested in what is most functioning and reliable, pricing is secondary. Naturally and probably it is emphasized in that most of them are business customers or they need to be at a certain place in a certain time and they want everything to function as easy as possible. (Interviewee H4.)

However, all the employees travelling for business or working with businesspeople, considered the taxi fares to be expensive when travelling on leisure time. Unaccepted overpricing was mentioned, however also that drivers needed to get reasonable payment for the work done. Even though the prices were increased they were still at a reasonable level. Interviewees were ready to pay a taxi service for its quality and comfortability, however not for extra luxury. Hotel employee H4 mentioned that customers rather pay a bit more for reliability and certainty of arrival. The interviewee also stated that the pricing was secondary for the hotel's business customers. None of the interviewees stated taxi prices to be decreased. Even though the elderly people were not personally aware of the current taxi fares, they had an image of them to be increased. Elderly people stated they were sceptical and worried of being overcharged.

Price comparisons were not been done. Three interviewees had a hint that there was no huge diversity on the prices between different taxi operators. Price comparison was seen frustratingly difficult according to one interviewee.

As a customer it is extremely hard to know, when you take a seat, how much it's going to cost, and you just must trust it to be approximately the same as before. (Interviewee H9.)

When asked of dynamic pricing, responses varied the most. Flexible prices were seen insignificant, difficult or impossible to follow, or the need of the service was seen too time-dependent to consider dynamic pricing to be reasonable. Two of the interviewees saw that dynamic pricing had also positive sides. Interviewee H3 guessed if dynamic pricing would bring more positive competition. Hotel employee H4 considered dynamic pricing to be a way to ease the rush hour availability issues, when rush hour prices would be higher. Interviewee H9 added that fixed airport prices were a good and reliable pricing method for the customers.

Seven out of the nine interviewees stated that there was no change in their taxi usage when compared to the time before the taxi market deregulation. Due to the MYK ride difficulties two interviewees had drastically decreased their taxi service usage.

One interviewee used both the MYK, Kela and normal taxi services, and stated that the MYK ride usage had decreased when others had stayed at the same level.

# 4.2 Customer insights of the deregulation

Quality, quantity and economic aspects guide the research towards the main research question of Consequences of the deregulation of the taxi services, through customer insights in the Oulu region. Certain interviewees argued that media brought up purely negative aspects of the coming market liberation, while some felt that the news had been both negative and optimistic. Elderly people felt intimidated of the changed situation. For the elderly people, media had caused a lot of uncertainty and unawareness of the current taxi market and its practices. Due to the trust issues, elderly people were sceptical and worried of being overcharged. Additionally, comparing the taxi fares was seen as challenging.

The interviewed pensioners missed the previous times of personal taxi service and set familiar drivers. Both the MYK users and interviewees being aware of the problems with the taxi availability for the customers with special needs, considered the deregulation to be unsuccessful due to the failed competitive tendering. The fact that a customer cannot choose a service provider was seen unfair. When the interest of the payer (such as municipalities) was to cope as cheap as possible, consumers stated that cheap pricing did not bring along the best quality. This was seen also in the answers of passengers using taxi services for business.

Deregulation was predicated so much with the freedom of choice: that the consumer can choose, who is driving him/her. But then these MYK rides according to the Disability and Social Welfare Act, there is no such choice. In these the payer has made the choice of the service provider for the customer. Regardless of... you just wait there or stay at home. That is the other option. (Interviewee H9.)

It is all this competitive tendering and these nice words "tendering" and "freedom of choice" which ruin everything. What freedom of choice it is when you can choose a taxi but don't know if the driver has professional skills or whether the car has four wheels and such? It is not a freedom of choice; people are forced for this kind of situation. (Interviewee H7.)

Some interviewees felt that a good taxi system was crashed, while others considered that increased competition and several operator alternatives, occurred development, minority employment, strong brands and increased cooperation with hotels had

been positive sides of the deregulation. As negative sides, overall decreased customer service, decreased fleet sizes, service uncertainty and increased prices were mentioned. None of the interviewees had increased their taxi usage and two pensioners had degreased their taxi usage tremendously.

I do not know the facts, however I guess that liberalisation was good and brings healthy competition and develops things further. One must maybe consider things in a different way for doing well in business. (Interviewee H1).

I don't know to whom the deregulation would have brought something good. Could it bring something good for someone? I doubt. Whom would this serve? Well maybe some unemployed that could be the only thing, they can begin driving a taxi. And they can take as much money as they want too. That sounds all so crazy. (Interviewee H7.)

The interviewees felt that the Finnish taxi system was trustworthy, however due to availability issues, taxi service reliability was seen decreased according to everyone. Waiting times were seen shortened by business travellers and hotel employees, while consumers using the MYK rides stated the waiting times to be expanded. Certainty of arrival was seen problematic in each of the interviews. When asked for proposals for improving the situation and liberated business, nothing was figured out at first, but finally several interviewees mentioned concentration on proper education to be one important aspect.

#### Outcomes of the taxi market liberation

In each of the interviews and during many questions, the interviewees automatically compared the present situation to the one before the deregulation. The pensioners at care home preferably looked back at the time before, by discussing and missing the earlier times. The interviewees at working life more preferably compared the earlier customs to today's manners, than merely looked back. Table 11 shows the results of the interview parts, where the interviewees discussed about the current situation in the taxi markets. The coded answers are marked in red for their positivity, blue for negativity and green for neutrality.

As negative outcomes of the deregulation, uncertain and decreased availability, as well as decreased reliability, were the mostly emerging aspects in the discussions. Ensuring certainty of arrival and correct timing was suddenly uncertain. Decreased taxi drivers' quality and lacking local knowledge were mentioned several times. Lack of education was seen lowering either service quality, safety or reliability. Increased pricing was stated, however it was not seen as an issue.

As positive outcomes, digitalization and new taxi ordering methods were mentioned. Increased cooperation with hotels was seen as a good development. Lowering of entry level was noticed to be a possibility for foreigners to begin driving a taxi. Strong, well-known and visible taxi operator brands were seen as positive market development. Two of the interviewees stated taxi stands to have more taxi cars than before. Two of the interviewees also wondered, whether the cars were arriving faster than before the deregulation. One interviewee mentioned it to be understandable, when the taxi cars currently focused on areas where the customers are, instead of quieter rural areas. Several different new taxi cars were noticed to have appeared in the Oulu city area.

Dissatisfaction was mostly seen with the consumers entitled to the MYK rides. The MYK service users are seen in Table 11 as interviewees H2 and H6-H9. Interviewee H5 was working with customers with memory-related diseases, who were driving both the MYK and Kela rides. The main deregulation outcome for the MYK users was a drastically worsened availability in the Oulu region. Overall the whole process flow was seen overly challenging for the elderly and people with disabilities. Altogether, there were no changes in the taxi usage, however certain MYK users had decreased their taxi usage due to the availability issues. Interviewees H5 and H9 stated that in the Kela rides, there were no similar availability issues than there was with the MYK rides.

Table 11. Market insight after the deregulation

H1	H2	Н3	H4	H5	Н6	H7	Н8	Н9
Negativeness	Customer ser- vice -	Quite reliable	Diversity	Selective	Decreased us- age	Bitter	Satisfied	Unsuccessful
Negative media	No personal changes	Positive competi- tion, development	Fleet sizes -	Lack of assistance	Uncertainty	Decreased usage	No changes	Bitter
No personal changes	Availability -> reliability	Deregulation -> people with disabilities	Reliability -	Stranger	Fearful	Only MYK		Disinterest
Alternatives	Brand	Driver quantity +/-	Local knowledge -> reliability	Illogical clauses	Bitter	Bitter		Bitter
No changes	Uncertainty	No personal effect	People interested	Illogical clauses	Uncertainty	Uncer- tainty		Prices increased, service de- creased
Positive com- petition, development	Diversity	Availability -> peo- ple with disabilities	Cooperation with hotels +	Availability -	Intimidation	Bitter		Traditional reliable
Diversity	Customer service -	Minority employment	Diversity - quality		Bitter	Failure		MYK reliability -
Reliable	Customer service -		Improving deregu- lation -> education			Giving up		Kela reliability +
	Taxi service process -	1	Education for equality?			Giving up		Brand
				•			1	Freedom of choice?
								Deregulation -> competitive ten- dering
								Comparing -
								Education -
								General agree- ments -> devel- opment - Care -
								Problem denial

#### Taxi service valuation

Valuation of the taxi service was seen in the answers' quality aspects. Figure 12 rounds up the valuations emerged from the interviews. The strongest valuation was in the service reliability and availability, and the taxi service had most of all an important role of certain arrival and being on time. After these, the taxi driver's expertise, customer service and service quality were valuated. The taxi driver's education, especially for local knowledge, was seen important. The taxi driver's expertise was seen substantial in confronting different kind of customers correctly, knowing the area and routes for providing a smooth and safe driving service, as well as being a friendly, polite customer servant. Each of the interviewees saw the taxi driver's profession to be customer service. Taxi car was valuated for its cleanliness, comfort and newness. For additional services, two of the interviewees mentioned a delivery of grocery bags and one valued taxi cars with bicycle carriers. Otherwise, no need for

additional services were seen.



Figure 12. Taxi service valuation

Taxi driver had a strong effect on the service quality and consumer's service valuation. When availability or reliability failed, most of the interviewees chose another taxi operator in the future, when possible. Additionally, the taxi driver's behaviour effected on the choice of the taxi operator. Economic aspects were not valuated as extensively as quality and quantity.

Figure 13 gathers all the consequences of the deregulation through the chosen consumers' insights, divided into positive and negative views.



- Alternatives
- Development
- Digitalization
- Positive competition
- Strong brands
- Traditional operators
- •Minority employment
- Cooperation with hotels
- Availability at taxi stands



# •Av

- Availability
- Reliability
- Certainty of arrival
- Lack of familiar driver
- Lack of personal assistance
- Local knowlege
- Education
- Customer service
- Freedom of choice
- Decreased usage
- Fleet sizes



# Other insights

- Bitterness for the competitive tendering
- Elderly consumers intimidated by media writings
- People interested and discussing of the market changes
- Concern of smooth service process for people with disabilities

Figure 13. Customer insight of the liberated taxi market

Even though reliability issues were stated to occur in the Oulu area, three of the interviewees mentioned it was a bigger problem in the Helsinki area. It was clearly revealed that reliability, availability and certainty of arrival were more important than premium quality. For the reliability, availability and certainty of arrival consumers were willing to pay for, not for extra luxury.

## 5 Conclusions

For the research, both primary and secondary data was collected. For secondary data, earlier studies and reliable statistics were gathered and introduced. For primary data, semi-structured interviews for carefully chosen interviewees were conducted.

Customer insight of the deregulation consequences differed in small details, but the main insight was the same in the Oulu region. Driving from A to B was clearly not enough. Even though driving was the main purpose, extremely important was to be

on time, serve politely, drive professionally and know the correct routes, even in exceptions. Additionally, the availability in a bigger picture, was crucial. If availability had failed before and consumer did not have the certainty of arrival, in most of the cases when possible, consumer chose a taxi operator having the best conceivable reliability. This effected also to recommendations. Business customers and consumers who travelled to the airport did not have an interest in being late. Nor hotel employees recommended their customers a service, in which they did not rely on.

The collected secondary data supported the received primary data. Customers in Oulu regarded that the Finnish taxi services were reliable, however trust issues had increased, and the reliability of the service had decreased due to failed service experiences. The number of taxi licenses and taxi cars had increased as seen from the secondary data and calculations. Interviewees stated that there were more cars and diverse taxi drivers in the area than before. Nobody stated that the increase was either positive or negative, however new drivers were considered to lack of professional knowledge. This clearly had caused consumers to recognize the importance of an education, local knowledge and customer service. Also, some small fighting between new and experienced drivers was noted.

As seen in the consumer price index, taxi fares in January 2019 increased with 4.4 % compared to June 2018. In Oulu, consumers had recognized the price increase, even though they had not seen any calculations or made price comparisons. Nevertheless, availability and reliability were features, of which customers were ready to pay for. In the Holm's Taxi service research from 2018, easiness of ordering, fast arrival, best price-quality relationship and driver's expertise were the found the most important values. This order had changed after the deregulation, and service reliability and availability were equal to the importance of the taxi driver's expertise. Easiness of ordering or best price-quality relationship were not seen as important values in the Oulu region. A taxi drivers' expertise was said to include polite and professional customer service, smooth driving and process flow, feeling of safety, local knowledge, correct encountering and serving different kind of people. Dishonesty was not accepted. The car itself had no major influence, however it should be clean and preferably quite new. Comfort, functionality, roomy and safety were liked car features. Taped and branded cars were noticed. For the elderly, car was enough when being

normal. Additionally, for the elderly, best qualities for a driver was to provide personal and helpful service. Merely businesspeople and foreigners were more demanding with the car qualities.

Negative outcomes of the deregulation were seen in service decrease due to the unexperienced drivers, tiff between experienced and new drivers as well as lack of local knowledge. Elderly people missed more personal service and familiar drivers. Due to competitive tendering, consumers using the MYK rides in the Oulu region (municipalities' combined rides according to Disability and Social Welfare Act), were extremely unsatisfied with the deregulation. The municipalities' combined rides were lacking availability and correct timing. Unavailability to choose a service provider was regarded as a failure of the deregulation and competitive tendering. One important deregulation objective for Finland's Ministry for Transport and Communication was the improving of taxi utilization. As concluded in this research, either consumer had no need to increase the taxi usage or failures in the availability and service had led to a decreased service usage. As positive outcomes, increased competition and minority employment, alternative ordering methods, strong taxi brands and increased cooperation with hotels, were discovered.

The research objective was fulfilled, and the set sub-questions were answered. Customer insight of the deregulation resulted both positive and negative aspects. When aiming to succeed as a taxi operator or a taxi dispatch centre in the liberated business, customer valuations must be recognized. Issues, which are depreciated, cannot be overlooked. The insight and comprehension received from the thesis must be occasionally and systematically complemented as well as goal-directedly deployed.

# 6 Discussion

Consequences of the deregulation on taxi services has been well-spoken and visible in the media. Customer insight of the phenomenon, and specially insight in the Oulu region, was not earlier researched. For the study, interviewees using comprehensively taxi services, or working with consumers using regularly taxi services, were

chosen. Reliable statistics and earlier studies of deregulation were gathered for comparing and increasing trustworthiness of the research with triangulation. Theoretical framework was guiding the empirical part and the results were structured to encounter with the theoretical framework, having baseline with the secondary data.

Before the research begun, there were some assumptions of the results. During the study it became clear that the deregulation had changed consumer mindset about the taxi services, unfortunately partly to a more negative and cautious direction. The unconsciousness on the new liberated market was visible. The discovered uncertainty concerned taxi market changes, customs and terms. However, there was also understanding and well-argued feedback. Consumers clearly had difficulties of changing the customary habits of acting, like asking for taxi pricing or comparing fares. Elderly were intimidated of the changes and some of them were in danger of giving up and preferably stayed at care homes, rather than ordered a taxi service which they found unreliable. As speculated in the introduction chapter, good service was further valuable for the taxi customers. Elderly valuated personal service, others especially smooth service, everyone emphasized taxi travelling to be a *customer service*.

The taxi service valuation was quite clear and simple from the customer point of view. The expected service costs must correspond with the expected benefits for providing customer value and continuity for the service usage. Luxury and premium were not longed for, neither regular consumers seemed to be willing to pay for it. Most of all, reliability and availability of the service were valued. For a smooth taxi service, correct encountering of different people, being polite, having sense of human nature and possessing good local knowledge were some of the well recognised taxi driver's qualities. Driving on customers' terms was regarded as essential. Lacking availability, incorrect timing, stiff process flow and unprofessional behaviour were depreciated. Overpricing was found unacceptable. A taxi car itself was seen sufficient when being clean, additionally some interviewees mentioned preferring a new car. For the elderly consumers, car was seen sufficient when being traditional and normal. Branded and taped cars were noted and functionality as well as safety were appreciated. One interviewee added to be interested in environmentally friendly taxi car options.

Along with the taxi service valuation, another sub-question concentrated on the liberation outcomes for a customer. Digitalization, leading to new ordering methods, was regarded as a positive outcome. One interviewee mentioned that visible and increased minority employment, mostly foreigners, was somewhat a positive outcome in the Oulu area. Most of the interviewees stated that there was an increased number of different kind of cars and drivers in sight than before. Digitalization was one of the set deregulation outcomes of Finland's Ministry for Transport and Communication. Another outcome was increasing jobs in the transport business, and these both were seen to be actualised in the Oulu region. However, the set outcomes of increased service demand, improved quality and availability, as well as decreased taxi prices, had not occurred in Oulu. All the interviewees stated that taxi prices had increased, however not yet over a critical limit. The taxi service availability in the Oulu region was regarded to be either the same or it had decreased. Occurred issues with the availability were seen as troubling, even though taxi stands had more cars than before. The taxi usage had either stayed the same or decreased due to lacking availability or insufficient customer service. Price comparison was seen difficult, and decreased trust in the business was visible during the discussions. In the customer service business, trust is fragile and occurred issues during the service process should be corrected promptly and properly.

Overall, consequences of the deregulation in the Oulu area, through customer insight, are summarised in availability, reliability, customer service and local knowledge. Each of these were found extremely important and in all of these, quality was decreased or seen as uncertain. Especially the customers entitled to the municipalities' combined rides according to Disability and Social Welfare Act (shortly "MYK rides"), were extremely unsatisfied with the competitive tendering that the deregulation had enabled. For them, the aimed savings of the competitive tendering were taking away their freedom of choice and easiness of moving around. For the business consumers, good availability with correct timing and reliability, was seen essential. For the newcomers in the business, availability was regarded as a notable issue, when a company can't reclaim satisfactory availability from the start. Failures caused

by newcomers were not tolerated as well as failures caused by experienced taxi operators. Reclamation handling was important. Consumers were willing to pay for reliability. Branded, taped and known taxi operators were regarded as reliable.

The increased number of new drivers and lack of education were seen effecting service quality with decreased quality level. Lack of local knowledge was experienced by many of the interviewees. The lack of local knowledge was seen effecting directly the service, smooth service flow and feeling of safety. The interviewees saw it worrying that passengers with disabilities should know the correct route in instead of the taxi drivers.

## 6.1 Comparing the results with earlier literature

Deregulating the taxi market has been realised in certain European countries before the realisation in Finland. When comparing the results gained from these countries with the results received from this study, various similarities are found. Many of the negative outcomes in Finland have earlier occurred in other deregulated countries as well. The price increase and conflicts between taxi drivers is a clear similarity. In each of these deregulated countries, the deregulation objectives set by the local authority or ministry has been similar, however objectives have not been realised anywhere outright.

Previous theses forecasted the taxi prices to increase due to deregulation and the price increase has actually occurred in each of the studied country that liberated their taxi pricing. Taxi prices have increased after the deregulation in Sweden, Netherlands and Norway, even though maximum pricing is set in the Netherlands and in some parts of Norway. This, added to the difficultness of comparing taxi service prices, were similar remarks in this study as well. For improving taxi utilization, the service demand should increase, which was not seen occurring in other earlier deregulated countries. Number of taxis has increased in each of the deregulated country. As an example, quality of taxi drivers the Netherlands was stated to have decreased and nationwide availability had disappeared. This study didn't search nationwide

availability, however interviewees were interested to know, how is the service availability in the Finnish rural areas. In Oulu region, taxi service quality was seen decreased due to new taxi drivers. Altogether, taxi drivers were regarded to be lacking know-how of customer service as well as local knowledge.

The Finnish taxi alliance has conducted two questionnaires with Value Clinic regarding customer attitudes about the deregulation. First one was conducted right after the deregulation in summer 2018, another one was done nine months after the deregulation. When comparing the results, it can be concluded that consumer attitudes about the taxi market liberation have clearly become more negative. In summer 2018, 24 % of the consumers reacted very or somehow positively on the liberation. Nine months after the deregulation, positively reacted only 12 % of the customers. Negative reactions were increased from 36 % into 53 %. According to the Finnish taxi alliance, in the earlier study, 9 % of the customers stated to be planning to increase their taxi usage in the future, while 12 % stated to be planning to decrease it. In the study results from 2019, 3 % stated to have increased the taxi service usage and 22 % of the respondents had decreased the usage. (Taksien piilokysyntä on jäänyt piiloon, 2019.) Consumer dissatisfaction as well as decreased usage was stated also during this study. Decreased service usage was found especially with consumers entitled to the MYK rides, while the taxi usage of other consumers had stayed the same.

The earlier studies and theses have concluded that good quality and reliable taxi services are most appreciated. Added with availability, these were the three most important features rising from this study as well. Additionally, earlier studies conducted a taxi driver's expertise, a vehicle cleanliness, an easiness of ordering, fast arrival and a good price-quality relationship to be important. While studying the consumer insight of the deregulation in the Oulu area, easiness of ordering or price-quality relationship were not mentioned as such during the interviews. However, bigger customers such as hotels, were satisfied with the new ordering methods that made the taxi ordering in the reception smoother and prompter. Mobile applications were being tested and used a bit already among the interviewees, however when aiming for certainty of arrival, consumers make the ordering by calling. Taxi services were regarded to be expensive, but for the reliability consumers were willing to pay for. The taxi

driver's expertise, politeness and local knowledge were found important. For a car, cleanliness was the main quality appreciated.

When comparing the earlier studies with this study, consumers' hierarchy of valuation has changed. Easiness of ordering was earlier regarded as most valuable aspect, now availability and reliability were found to be the most important features of the service. The taxi driver's expertise was highly valued. After the deregulation, concentration was in secure, smooth and polite service, where true local knowledge was appreciated. This study and the earlier ones state similarly that there is no actual need for additional services. The need and demand for additional services is narrow in the taxi business. However, premium service was required by some business customers and foreigners. Furthermore, environmentally friendly cars, bicycle carrier and shopping for groceries were mentioned.

In the taxi service study conducted by the Finnish taxi alliance (Holm 2018), biggest deregulation faults were seen to be in decreased availability and increased waiting times. Increased waiting times, when excluding the MYK rides, were not seen as an issue in the Oulu region during the present study. However, decreased availability was seen as a notable issue widely among the interviewees.

# 6.2 Practical implications and contributions

As the study was not a scientific type, the aim was not to accomplish significant theoretical contributions. In the study, concentration was on customer insight of the phenomenon and for this, theory assisted analysis was used. According to Tuomi and Sarajärvi (2018), theory guides the analysing and instead of testing a theory, earlier literature has influence in creating *new ideas*. The research resembles theory elaboration whereas earlier literature and previous observations from the taxi market are researched and analysed deeper. (80-81.)

When considering the changes and outcomes, that the deregulation has brought through customer insights, there were some findings for improving the Finnish taxi market to benefit each sides. As positive aspects, digitalization was regarded to be improved and new ordering methods were found as functioning, practical innovation

for consumers, hotels and companies. These can all be further enhanced and fostered in the future. Taxi price comparison should be made effortless to complement the digitalisation. For the Finnish taxi dispatch centres and operators, it is important to know that good customer service and professional, polite drivers are highly appreciated. The minor demand of premium taxi services leads to a quite narrow niche. More preferably good availability, correct timing during the whole process and reliability of the service have high value for the businesspeople but also for other passengers. The availability and reliability of the service and whole process must be examined in the management level.

For the lacking service reliability, taxi driver's education was seen necessary. When for instance the car fleet is not wide and availability fails, the taxi driver's expertise in customer service is extremely important. Reclamation handling was appreciated, and failures should be turned around with an excellent customer service. When a consumer is satisfied with the service, re-usage occurs more often. Professionality and local knowledge played both important roles in passengers' feeling of safety. Even though some of the taxi operators have kept the education obligatory for their drivers, keeping the education generally obligatory should be considered when viewing and re-considering the deregulation success in the ministry and policymaker level. Issues with new taxi companies, decreased customer service and lack of local knowledge have clearly decreased the consumer trust in the taxi business. Even though there are more jobs, taxi cars and drivers working in the taxi business, the service demand is not increased. The taxi utilization is not improved as the Finland's Ministry for Transport and Communications planned. With the same demand and higher supply, prices have increased for keeping the operation at least somehow profitable.

Reliability and availability go hand in hand. When the Finnish Competition and Consumer Authority announced, organizing driving shifts can be perceived as a cartel, taxi operators have minor means to assure availability for the quiet moments and calm districts. (Virtanen 2019.) When the customers are complaining of the lack of availability in certain areas or times, taxi dispatch centres and entrepreneurs have merely a possibility for improving the actions by advising the drivers. Here some adjustments should be made by giving a possibility for the taxi operators and dispatch

centres to promise and succeed in providing better availability. Added to the Finnish consumers, the coming tourists must not be forgotten. The Finnish taxi business should have reliable and functioning image also outside the country borders.

Enabling competitive tendering on the taxi business usually means savings for the authorities and payers requiring these. Nevertheless, quality and availability of the service should be regarded in the competitive tendering. The elderly, disabled customers and others entitled and needing either Kela or MYK rides, should have the possibility to gain reliable, functioning service, which will enable a normal flow for the weekdays. The travelling and moving around smoothly should be made effortless. Pensioners missed familiar drivers which is understandable. However, when the taxi service is functioning smoothly and service level is stable, the need for familiar drivers may fade out.

People working in the taxi business must realise what is valuable for a taxi customer to succeed in the liberated market. Marketing campaigns must be widely done and spread the knowledge of reliable taxi services to reduce anxiety among elderly and uncertainty among many others. Communication and informing of consumers must be constant. Falling into accusing competitors of unreliable service is not appropriate in the uncertain situation. It must be kept in mind that with a reliable and great customer service, a taxi operator has a strong base for succeeding in the business. Good features must be brought to the light, keeping honesty and truthfulness in the discussions and communications. Both positive and negative feedback must be confronted and responded discreetly.

Information of mobile applications were noticed from social media. Even though otherwise promotion was not seen important, the taped and branded cars were regarded as a sign of known and reliable service provider. Strengthening a brand increases trustworthiness in the consumers' eyes. With a strong and known brand, customer tolerate possible failures in the service better and with correct reclamation handling, customer satisfaction can be even improved.

When considering a service value proposition for the different customer segments, five main consumer segments come into question. Elderly people, passengers with disabilities, businesspeople, children and consumers unregularly using taxi services,

can be considered to formulate main customer segments. Here elderly and people with special needs will be combined and regarded as one, when students are perceived to belong to the passengers using taxi services seldomly. OTAXI Oulu was chosen to gain a more profound market perception from the research results in the area, and the proposed value propositions are reflected into company operations.

Precise timing, good availability and reliable service were regarded as most important values for the businesspeople, companies and hotels. The pricing was a secondary aspect. For the businesspeople, value proposition must be targeted to include trustworthiness and reliability of arrival. OTAXI VIP has been launched earlier for premium, high-ranking taxi service needs. The service is targeted for the business customers, politicians, weddings, special occasions and others. When the full VIP service is not required, another comparable service concept for serving regular business customers could be considered. At least, emphasizing and highlighting the reliability and punctuality of the OTAXI taxi service must be marketed to this customer segment. A clean, new and comfortable car was of a meaningful quality. Stepping out of the car, opening the door and helping with bags must be self-evident. Encountering the passengers and sensing whether they wish to talk or not, is challenging but important. Cooperation with the hotels, companies and authorities must be cherished and continued.

For the elderly people and the customers with disabilities, reliability and personal customer service were regarded the most important features of the service. The dissatisfaction and feeling of giving up was obvious when interviewing the pensioners. For them, the competitive tendering for the MYK rides has been a failure. Due the stiff process, lacking availability and failing schedules, elderly preferably no longer used MYK taxi services at all. When the pensioners are lacking money for using other taxi services, this leads to staying at the care homes instead of visiting friends and family. From the findings, value proposition for this customer segment is to provide a functioning and caring customer service. For OTAXI, this would also mean lowering prices for the pensioners. In the current situation of decreased utilization, the taxi dispatch centre should consider handling the taxi service needs, which currently are not taken care of and causing the passengers to stay at home instead of using the taxi services.

Consumers using the taxi services regularly for both business and leisure, considered the taxi prices to be high but at a tolerable level for the necessary need. The smooth service flow was regarded to be important, starting from the chosen ordering method, polite service and safe drive, ending with a good feeling and quick, exact arrival to a wished destination. Taxi driver's behaviour had a significant meaning during the whole process. Reclamation and its proper handling were seen important, which OTAXI must consider and improve whether seen necessary. Clean cars, driver's expertise and local knowledge are important for the customer segment as well. These must all be required from the drivers driving under OTAXI fleet. This study did not investigate insights of students' or consumers' using the taxi services extremely rarely. As an assumption, this is the most price sensitive customer segment. Additionally, children were excluded from the present research.

As the market access for the new drivers has been lowered, OTAXI must take this into account when educating its drivers. Education, even though not anymore required by the law, should be kept and stay obligatory for the drivers operating under OTAXI, also in the future. The taxi driver education should be comprehensive and include encountering of the passengers, correct and polite customer service, overall understanding of children and people with special needs as well as local knowledge. Adding knowledge of the most common illnesses and first aid to the education, should also be considered. Fluent and secure process flow includes a comprehensive knowledge of many things, not just driving from A to B. A quality taxi driver's education is a competitive asset for any taxi dispatch centre or an operator, and will improve both the taxi drivers, taxi operators and customers satisfaction in the long run.

Even though increased taxi pricing was not yet over customers' acceptance, setting higher prices compared to the competitors will bring more responsibility on reliability and service quality. The niche for supplementary services is narrow. However, when wishing to serve special needs, premium, groceries and environmental friendliness have during this study shown some interest. Added to OTAXI VIP, the taxi dispatch centre has earlier launched OTAXI GREEN for environmentally friendly cars. Both additional services should be kept and marketed for the suitable customer segments. The most suitable customer segment for OTAXI GREEN should be investigated. For the risen wish from the certain interviewees of doing grocery purchasing

on behalf of the customer, is one thing at least to consider. However, market access, profitability and competitors already operating in cooperation with grocery stores must be carefully considered.

When aiming for improving both customer and driver satisfaction in practice, all the results gained during this study of customer insight must be considered in the taxi operations. A great customer experience and a customer satisfaction leads to a service loyalty. In a long run, satisfaction of the service in each side can at its best lead to an increased taxi utilization and business profitableness.

#### 6.3 Limitations of the research

The present research was practical instead of aiming for strict theoretical view. Qualitative research enables deeper, wider insight, than quantitative research would have enabled. On the other hand, quantitative research would have enabled more numeric results and calculations of consumer valuation points and service features. For reaching the set objectives of the research, qualitative approach was a justifiable choice. For the internal validity, research objectives were strictly guiding the theoretical and empirical part. In the empirical part, focus was thoroughly in finding deep insight.

The research concentrated on insights of customers using taxi services regularly or working in a milieu, where taxi services were often needed. The choice was well-argued and there was no need for studying consumers using taxi services very rarely for reaching the set objectives. When combining and considering both secondary data and theories in the analysing process, theory assisted approach was a suitable choice for the thesis. Instead of creating new theories, new ideas and directions were discovered.

Objectivity and subjectivity during the interviews were carefully considered. As the researcher was working in the taxi dispatch centre and seeing many sides of the phenomenon and its effects, reaching objectivity and subjectivity during the whole research process was challenging. Staying objective and subjective for the results was

assisted by recording and analysing carefully each of the interviews, organizing transcripts according to the set themes, as well as coding and combining these outright. The pre-planned themes prior to the interviews and excluding oneself from communicating or changing opinions during the interviews, was important. Only the collected secondary and primary data were influencing the analysing and forming of results during the research process. The objectivity was strengthened with triangulation, as empirical data was compared with the earlier theses, studies and numeric data.

Subjective interpretation cannot be repeated by another researcher. However, the research was done to gain deep insight and is repeatable in a certain time and location but can have effect with the chosen interviewees. For the research, interviewees were chosen carefully for their knowledge and wide usage of taxi services. When the study had been concentrated on consumers having no knowledge of the business and using only rarely taxi services, input had been different in some parts. The reliability of the study was increased by explaining the pre-planned themes in theoretical framework as well as by showing the coding examples of the interview transcripts. The research is transferable since most of the results can be associated with earlier studies. Within this and by using secondary data as another reliable source, triangulation increases internal logic and validity of the research. The secondary data and collected statistics of the phenomenon were used for comparing, supporting and confirming the received results. (Tuomi & Sarajärvi 2018, 118-125.)

When interviewing pensioners, saturation occurred during the third interview. The biggest issues with the deregulation in the Oulu area were detected promptly by interviewing consumers using the MYK rides. One pensioner made a difference with answers by being divergently satisfied with the situation, however stating the availability to be questionable. Even though the interviewee brought sudden deviation to the answers, the interviewee was not excluded, and the results contribute the thesis. The reason for her behaviour was analysed by me with supporting literature and by an acquaintance working with different disabilities. For a person having lifetime CP disability and a long depression behind, it is not unusual to aim for positivity in every turn. The subject is not studied widely with elderly having CP disability, however de-

termination, own positive attitude and motivation are seen to be assisting significantly person's well-being. This was considered in the analyses. (Rosqvist, Lehtonen, Kallinen, Airaksinen 2009, 24-36.) For other consumers using taxi services regularly and employees working with them, saturation occurred during the fourth interview. Businesspeople differ with their usage manners with other consumers, who are using taxi services in the leisure time. The biggest difference is the attitude towards pricing and reliability: pricing is secondary, reliability and timing are extremely important. As stated, consumers using taxi services only randomly were not included in the present research. For them, the pricing would assumingly have even a bigger meaning when the usage is not regular and familiar.

External validity, meaning how applicable the findings are to others, was shown to be good in the previous chapter 6.2. The results are applicable for taxi operators in order to improving their business, as well as enhancing customer and taxi driver satisfaction. For the decision makers, the results can act as a guidance in the future deregulation changes and specifics. For customers, findings can improve customer satisfaction and customer experience, when applied correctly by taxi operators and drivers. In educational aspect, the findings give a good ground for planning and executing taxi driver's education.

#### 6.4 Recommendations for future research

As statistics show, the number of taxi cars and drivers have increased, yet consumers have not increased their service usage, rather decreased it. The targeted improving of taxi utilization has presumably failed. When the utilization is decreased, the profitableness of the taxi business is a question requiring further research. The profitableness also effects driver and taxi operator satisfaction, work well-being and career continuity: all being extremely important for the business success.

For the possible deregulation modifications in the future, nationwide availability should be investigated. Before the deregulation, taxi operators had 24/7 service responsibilities both in rural and urban regions and it was realised by working and driving in shifts. Whether this has changed the availability, especially in smaller regions

nearby Oulu, is an important aspect to know for future instructions and deregulation modifications. Most worrying during the research was the reality that the elderly people and people with special needs were suffering from the deregulation and occurred changes. Taxi service must be a service that is available also for customers having disability to move from one place to another otherwise. Regardless of where they live.

To benefit taxi operators, additional quantitative research comes into question. With the qualitative research, vast amount of deep insight of the deregulation and current values was gained. To support these findings and to increase the knowledge of specific customer needs, quantitative research is a convenient choice. Conducting a quantitative research would verify the question of additional taxi service needs and their real demand, especially with environmentally friendly cars. A more detailed and numeric data supports the future decisions of taxi dispatch centres and operators. With the data, more specific customer value propositions can be prepared.

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# **Appendices**

#### Appendix 1. Semi-structured interview body

- ✓ EN: Taxi deregulation was executed in July last year. How much have you followed the news of taxi business before and after deregulation? Any thoughts of media and news?
  - FI: Taksiala vapautettiin viime vuoden heinäkuussa. Kuinka paljon olet seurannut mediakirjoittelua taksialasta ennen ja jälkeen taksiuudistuksen? Mitä ajatuksia nämä ovat herättäneet?
- ✓ EN: In your opinion, what happened in general for the taxi services after the deregulation?
  - FI: Mitä mielestäsi tapahtui yleisesti taksipalveluille taksialan vapauttamisen jälkeen?
- ✓ EN: A vehicle, having three wheels and no taxi light on the roof is also permitted to operate as taxi in Finland, if all the licenses are valid. How do you see this kind of taxi being suitable for your needs?
  - FI: Ilman taksivaloa oleva kolmipyöräinen ajoneuvo on oikeutettu toimimaan taksina Suomessa, mikäli tarvittavat lisenssit ovat kunnossa. Kuinka näet tämänkaltaisen taksin soveltuvan tarpeisiisi?
- ✓ EN: How regularly do you use taxi services? Has the need increased or decreased during the last year? (and why, if so?)
  - FI: Kuinka säännöllisestä käytät taksipalveluita? Onko taksin tarve lisääntynyt tai vähentynyt viimeksi kuluneen vuoden aikana? (ja miksi, jos on?)
- ✓ EN: How trustworthy do you see the taxi services in this region to be? FI: Kuinka luotettavina pidät alueen taksipalveluja?
- ✓ EN: The number of taxis has increased in the Oulu region. Have you noticed this to bring some advantages or disadvantages?
  - FI: Taksien määrä on kasvanut Oulun alueella. Oletko huomannut tämän tuoneen jotain etuja tai haittoja?
- ✓ EN: There is no more obligation to provide taxi services at certain times or places. Do you see positive or negative effects of this?
  - FI: Aikaan ja paikkaan sidottu palveluvelvollisuus on poistunut. Näetkö tähän liittyvän mahdollisia positiivisia tai negatiivisia vaikutuksia?
- ✓ EN: What kind of changes in taxi availability have you noticed the deregulation has brought?
  - FI: Millaisia muutoksia taksin saatavuudessa olet huomannut taksiuudistuksen jälkeen?
- ✓ EN: The taxi business has been open for competition almost for a year now. What is your overall opinion on the success for deregulation?
  - FI: Taksimarkkinat ovat olleet avoinna kilpailulle lähes vuoden ajan. Mikä on näkemyksesi taksiuudistuksen onnistumisesta?

- ✓ EN: After the deregulation, taxi companies are free to offer more than ride from A to B. Is there something more that you would like to have? What kind of service is missed in the taxi services that you would prefer?
  FI: Taksiuudistuksen jälkeen taksiyritykset ovat vapaita tarjoamaan enemmän, kuin
  - FI: Taksiuudistuksen jälkeen taksiyritykset ovat vapaita tarjoamaan enemmän, kuin kyydin paikasta A paikkaan B. Mitä lisää toivoisit taksipalveluilta? Millainen palvelukokonaisuus taksipalveluista uupuu, jonka haluaisit palveluun mukaan?
- ✓ EN: Does service provider matter or is it insignificant, which taxi operator you choose?
  - FI: Onko palveluntuottajalla väliä vai onko merkityksetöntä, minkä taksiyrityksen valitset?
- ✓ EN: Based on which factors do you choose the taxi service provider? FI: Millä perusteilla valitset taksipalvelun tuottajan?
- ✓ EN: How do you normally book or take a taxi? (Why exactly this way?) FI: Kuinka normaalisti tilaat tai otat taksin? (Miksi juuri tällä tavalla?)
- ✓ EN: What are the three most important things, when choosing a taxi service provider?
  - FI: Mitkä ovat kolme tärkeintä asiaa, joihin kiinnität huomiota, kun valitset taksipalveluyritystä?
- ✓ EN: How would you describe a successful taxi ride? What kind of things make the service successful?
  - FI: Kuinka kuvailisit onnistuneen taksimatkan? Mitkä seikat tekevät taksipalvelusta onnistuneen?
- ✓ EN: How can a taxi service be a failure? FI: Kuinka taksipalvelu voi epäonnistua?
- ✓ EN: What kind of significance does the taxi *car* itself has for you? (and what kind of a car it is?)
  - FI: Mitä merkitystä itse taksiautolla sinulle on ja sillä, millainen auto se on?
- ✓ EN: If you regularly book a taxi from a specific taxi operator, for which reasons or circumstances would you consider changing the taxi operator to another?

  FI: Mikäli säännöllisesti varaat taksin tietyltä taksiyritykseltä, mitkä syyt tai olosuhteet saisivat sinut harkitsemaan taksiyrityksen vaihtoa toiseen taksiyritykseen?
- ✓ EN: Taxi driver is no longer obligated to have any education for the job. What is your opinion on the necessity of education and training?
   FI: Taksinkuljettajalta ei enää velvoiteta minkäänlaista taksinkuljettajakoulutusta.
   Mitä mieltä sinä olet koulutuksen tarpeellisuudesta?
- ✓ EN: Removing the obligation of taxi driver's education has led to increase in taxi drivers' numbers in the taxi business. What kind of impacts of the increase have you noted?
  - FI: Taksinkuljettajan koulutusvelvoitteen poistuminen on johtanut taksinkuljettajien määrän kasvuun. Minkälaisia vaikutuksia olet huomannut kasvun tuoneen?
- ✓ EN: What kind of taxi driver do you consider to be a good taxi driver? FI: Millainen taksikuljettaja on mielestäsi hyvä taksikuljettaja?

- ✓ EN: Added to taxi driver's training, the test for locality knowledge will be soon excluded. What is your opinion on the test? (How important do you see local knowledge?)
  - FI: Taksinkuljettajan koulutuksen lisäksi, paikallistuntemuskoetta ei pian enää vaadita. Mikä on sinun mielipiteesi paikallistuntemuskokeesta? (Kuinka tärkeänä pidät paikallistuntemusta?)
- ✓ EN: What is your opinion on taxi service prices?
  FI: Mikä on mielipiteesi taksipalvelun hinnoittelusta?
- ✓ EN: Have you made price comparisons between taxi companies? If yes, from where have you gathered the information for the comparison?
   FI: Oletko tehnyt hintavertailua eri taksiyritysten välillä? Mikäli kyllä, mistä olet kerännyt tämän hintatiedon vertailuun?
- ✓ EN: Have you noted any increase in marketing or advertisement actions after the deregulation? What kind of sales activities have you noted, if any?
   FI: Oletko huomannut kasvua taksiyritysten markkinoinnissa tai mainostamisessa taksiuudistuksen jälkeen? Millaista myyntiaktiivisuutta olet pistänyt merkille?
- EN: How important for you is quality compared to pricing?
  FI: Kuinka tärkeää sinulle on laatu hintaan verrattuna?
- ✓ EN: How do you feel about having more diversity on taxi prices: for example, increases in rush hour times and discounts in quiet times?
   FI: Tulisiko mielestäsi taksin hinnoissa olla enemmän vaihtelua? Esimerkiksi, hinnannousuja ruuhka-aikoina ja hinta-alennuksia hiljaisina aikoina?
- ✓ EN: Added to taxi drivers, whom else have you been in touch with regarding taxi services? (customer service, booking central, seller..) What kind of experiences do you have of these encounters?
  FI: Keiden muihin kanssa, taksinkuljettajien lisäksi, olet ollut tekemisissä taksipalve-
- on näistä kohtaamisista?

  EN: Finally, when thinking and comparing the taxi business in Oulu one year ago for

luihin liittyen? (asiakaspalvelu, puhelinvälitys, myyjä..) Millaisia kokemuksia sinulla

- today's situation, what are the major changes that concerns you and your taxi usage?
  - FI: Lopuksi, kun katsotaan taksialaa Oulussa vuosi sitten ja verrataan tähän päivään, mitkä ovat suurimmat muutokset, jotka koskevat sinua ja taksinkäyttöä.

# Appendix 2. Parts of an interview set into themes, coded

H5	Themes	Transcriptions		
	Background	Employer at The Alzheimer Society of Finland The National Memory Programme	/	
Taxi market insight	Before deregulation	It caused a lot of fear in people that what is this taxi now. And also that should we, like when being abroad, agree with the taxi driver, what the ride costs. And if you don't remember to agree it can be a totally different sum.	Fear and unawareness what will come	Unawareness
		Maybe some kind of fear, what people received from the media writings.	Fear from media writings	Intimidation
		That kind of communality and helping and love for one's neighbour it probably isn't taxi drivers' business to shop with the customer, but so the taxi drivers did.	Love for one's neighbour	Assistance
		That kind of personal individual service that has been earlier, meaning a taxi driver to pick you up from home and guides you.	Personal, indi- vidual service process	Personal ser- vice
		I don't know if it belonged to the taxi drivers' duties before, but people most often helped. When the taxi driver was to wait on the parking slot, during the waiting time he/she helped with shopping as well.	Personal, indi- vidual service	Personal service
		Earlier our customers had the familiar taxi driver, who knew, and a familiar taxi.	Familiar driver	Familiar driver
Taxi market insight	After deregulation	One of our customers with memory-related diseases drove with a taxi to the grocery store but since the driver didn't go with, couldn't find the needed things from the store and returned without buying anything.	Not assisting with everyday needs	Lack of assis- tance
		Now any driver and taxi can come to pick up our customers and the drivers change all the time.	Lack of familiar driver	Stranger
		I don't know fact why, but when there is so much news about it, people more easily talk about how they experienced this and that. But that waiting time is probably one that I at least feel has happened after the deregulation. That most of the changes has happened with that: you must wait and you can't trust that the taxi will come. Maybe this has risen to be the most important issue that is different, than first was thought.	People talking much, at least availability changed for fact	Availability -
Quality	Product (taxi service)	We just talked with co-workers that this trustworthiness. That can you trust that you'll be at the airport on time. But I don't know how realistic it is, the more there has been news about taxis, the more people assumingly bring these things up.	Reliability, be- ing on time	Reliability, timing

	When our people step into the car, the taxi driver should help with everything. Dealing with money is problematic in with our people. If they go to a grocery store and have to pay with credit card and so, and many of them live alone and have nobody. These things that when the need for help comes, maybe the taxi driver could help.	Assisting thought the whole driving occurrence	Personal service
	I could say thank you, and taxi services one year also got rewarded, due to this finding missing people is a good system. If someone got missed from somewhere, and taxis move all over so they can find the person. That has been very good. Since the emergency and need for help that time is extremely big.	Good emer- gency assis- tance for miss- ing people	Emergency assistance
	Finnish taxi is anyhow reliable. And you can pay more for the trustworthiness. While being abroad, you go with 2 euros long rides, but you never know what kind of it is.  In my opinion, taxis are in quite significant	Reliable compared to abroad taxi ser- vices	Reliable Significance
	position, while they drive quite different kind of sick people.	significant job	
Physical evi- dence (car)	Taxis can be separated and spotted now better once they are painted overall, you can see them very well. I consider this to be good.	Clear tapings	Brand
	I am quite pedantic, since my husband has been car seller for 25 years. I check, what kind of a car it is. It doesn't have to be Mer- cedes but quite new, quite big car.	Knowledge of good cars	New, roomy
	Of course, I have not selected, but there is now this of hybrid car, I don't know if it could be in the future that kind of a trend, in which I would like to be in, we have dis- cussed about this also at home.	Discussions of hybrid car mod- els, possibly in- terested	Ecological
Promotion (how)	Nothing noticed	Nothing noticed	No mentions
People (in- volved)	It is concerning with this deregulation that if someone 25-year old begins as a taxi driver, it's different, if an experienced, stabile driver is driving you. Anyhow the feeling of safety aboard is probably the most important feeling and not the bouncy driving behaviour that you change lanes from there to there.	Safe, stabile driving habits	Safety
	I don't know, if the taxi drivers would need some kind of education for memory-re- lated diseases, there are quite a lot of them anyhow.	Education for memory-related diseases	Education - diseases
	You can drive smoothly even though in a hurry, and even though they speed, customer has the feeling that its under control.	Fluent, safe driving	Safety
	Only the behaviour of a taxi driver would make me change the service provider, nothing else.	Customer service skills	Behaviour

	For taxi driver profession should be selected persons, who know how to confront people and understand the person despite of all kind of sicknesses. But I believe, people who can confront people correctly, are being selected for the profession.	Taxi drivers and customer servants by nature	Knowledge of human nature
	Good taxi driver is one, who can really listen. And works as a customer server. Politeness and confronting people are the most important things. Than you are kind and polite. Knows how to confront different kind of people, whether disabled, sick, healthy and all kinds of. It is really challenging.	Ability to listen and confront, politeness, cus- tomer service	Thoughtful customer service
	Especially with these MYK -orders, it is extremely important, what kind of person answers the phone. And often you have to call second and third time, and it is very important that there is a person and understanding audience.	Service and understanding at the dispatch centre	Customer service
Place (purchasing)	Situations for people with memory-related diseases are in every way challenging already. It should be smooth that the ride would go well, and they could enjoy all the other things related, and not be nervous about it.	Fluent service process and timing are im- portant	Fluent service process
Process (flow)	I have not compared the service providers. Usually I take the one that is at the taxi stand, it doesn't make that difference.	Not comparing, habit	Careless, habit
	If I have tight schedule, I order a taxi. Mut usually when the schedule is not so tight, I usually walk to the nearest taxi stand and take a taxi from there.	Prompt needs by calling, oth- erwise taxi stand	Taxi stand, calling when hurry
	Today's navigators are so good when they know the route. But often in these populous places, local knowledge is useful when you can change the route, when you see or know somewhere being a car accident, rush-our or some big event. Local knowledge is, when you can choose handy routes without getting stuck into a traffic jam for a long time. Local knowledge is useful in bigger places.	Navigators helping, local knowledge still needed for smooth rides	Local knowledge for smooth ser- vice
Quantity Taxi availability	This concerns MYK-taxis that when you for example are going for a theatre, the taxi isn't coming. Or they arrive late.	Timing, reliabil- ity	Reliability -
	Making taxi cars more visible has been good. But I don't know, if one can see increase in taxi numbers any other way.	Taxis are seen, not necessarily increased	Brand
	This on call duty at peripheries. That if there will be no ride, it is useless to stay up all night, it is frustrating for sure. But otherwise I don't know	In rural areas, on call duty to be thought through	Needless on call duty
	I guess that renovation makes people talk, and it is hard to say truth and fact, why these issues are discussed so much. Is the change in availability due to deregulation or because of people talking and telling more now, when this thing is on surface?	Change in deregulation and discussions, cause-effect re- lationships un- known	Increased discussions

	The timing. When you think of our people with memory-related diseases an incorrect timing can confuse their whole day. Mood is so sensitive for these people. When the day begins with being late, the whole day is ruined, even though other things go well. The feeling "stays on". The day is totally different, if a taxi is on time. It definitely effects.	Reliability, be- ing on time ex- tremely im- portant	Timing -
	I don't know if it's deregulation or what, but there are taxi cars at taxi stands quite well. There are almost always taxis at taxi stands.	Taxi car well available at taxi stands	Availability at stands +
Economic Price (category)	I have got kind of a similar feeling that when you get into a taxi (it can be a wrong feeling) that you need to make sure, if the price is valid, and that it won't change during the ride. I don't know if it's just a feeling.	Feeling of un- certainty and reliability issues	Reliability
	I have not noticed that pricing has any they are quite the same prices, than before. Not at least much increased, I don't know if would have decreased.	Not any notable changes	No changes
	No comments from customers about pricing.	No comments	Insignificant
Sustainability	Customers must use taxi services, most of them can't have driver's license anymore.	No changes	No changes