UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

Possible Solutions of Car Parking Problem of Retail Business in Gothenburg City Center

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Abstract

Reduction of car parking place is a current phenomenon for most businesses in the Gothenburg inner city. Many customers are reluctant to buy products (especially high volume products) from shops in the city center due to shortage of car parking space. A number of businesses have already disappeared from the city center because of this problem. The main objective of the project is to find out possible solutions for minimizing the problem of reduced parking in the city, so that no other business is likely to disappear and so that consumers may feel free to visit and enjoy shopping as much as they want. The distribution system might be improved to provide better customer service. Additionally, new business strategies could be implemented to continue the upward trend of selling. To do this, people should be properly informed about new radical business services that will allow them to return to the city center like they used to. A convenient solution to the mentioned problem would mean good results for retail businesses. Overall, it must benefit consumers to buy high volume merchandises from stores in the city center and this will only be possible when parking problem is resolved.

Keywords: Distribution system, Direct distribution system, Customer Channel Requirement, Car parking, Customer service, Home delivery service, City center, Accessibility.

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Table of Contents

1. Introduction

This section represents the introduction and description of problem from both authors and Swedish Trade Federation (SVENSK HANDEL) perspective. As a point of disciplined question and well defined delimitation, a well organized description is found with problem formulations that contribute to provide clear scenario of the thesis.

1.1. Problem Background

At first Swedish Trade Federation (SVENSK HANDEL) found the problem by researching last couple of years based on the working in close relationship with retailers, wholesalers as well with establishing shopping centers and improving business around in Sweden. Swedish Trade Federation main important role is to handle the major part of Swedish domestic trade and commerce. To illustrate their range, Swedish Trade Federation is not only closely involved with famous Swedish companies like H&M and IKEA, but also with other international brands like Spanish Zara *(Source: Svensk Handel, www.svenskhandel.se).*

Swedish Trade Federation has been observing during the last several years, that a good number of businesses already disappeared from the city centre due to the reduction of the car parking place. The aim and goal of Swedish Trade Federation are to solve the mentioned problem as soon as possible; so that no business is likely to disappear again from the city center. Besides people can return to the downtown to enjoy shopping as long as they wish which they used to do before. Swedish Trade Federation is responsible to minimize problems conveniently, because of being representative of retailer in Gothenburg (and rest of Sweden) which can help both businesses and customers.

One of the assertions of this, already we have been familiar with the mentioned problem that Swedish Trade Federation (SVENSK HANDEL) would like to remove efficiently. For example, when we need to buy some high volume merchandise from the inner city then the store is not found in the city center. The main reason is the businesses have been moved from downtown to outside of the city on places like; Bäckebol, Backaplan, Kållered and so on. One practical

example could be mentioned here, if a student needs to buy a computer then the student must travel to the suburbs of the city to be able to find and purchase the computer. It is important to mention that most students have no private car and it is stressful for them to rent car. Besides, elderly people that already have difficulties in travelling around in the city to buy both high and low volume merchandise. As a result, it is definitely frustrated issue for everyone when people need to travel so far from the city for buying necessary items which should be available to buy in downtown.

From our realization having student and customer perspective, we are interested to help Swedish Trade Federation (SVENSK HANDEL) to find out some possible solutions. Our main strengths are to be experienced that problem and become familiar with Gothenburg city's geographical structure. We believe that the recommendation and possible solution will help not only today's retailers and customers but also the future potential customers due to the fact that Gothenburg's population is growing with 5000 people every year *(Source: Perspektiv Göteborg 2008, Göteborgs stadskansli).*

1.2. Problem Definition

The main problem definition of the thesis is:

"How to come up with different recommendations that can be treated as convenient possible solutions to minimize problem of reduction of car parking in the city; so that, no business is likely to disappear from the inner city?"

1.2.1. Sub Questions

We find some sub questions that deals with the main problem definition. These sub questions shows clearly how to develop ideas by evaluating main problem definition in order to discover expedient possible solutions. Sub questions are as follows:

(i) How to use available car parking place efficiently?
(ii) What are the advantages of our recommendations?
(iii) Are there any other distribution channels for the retailers?
(iv) Which customers and businesses might be affected?

(v) What kinds of interruption may appear?

(vi) How can we prepare the retailers and customers for these changes, so that the reforms will be implemented as smooth as possible?

1.3. Purpose

The purpose of the thesis is to provide some useful recommendations to Swedish Trade Federation which can be also possible solutions for retail businesses in Gothenburg to minimize the current problem of shortage space of car parking problem in the city center. Besides we wish to discover new business strategy for retailers that may possibly contribute to lessen the mentioned problem and provide better customer service.

It is important to mention that it is quiet difficult to build new parking place in the downtown at this moment. So our inspiration is to find out some good proposal having alternative solutions of the car parking place and how to use available car parking space efficiently, because Gothenburg city is expanding every year with increasing number of population. Therefore retail business needs to have innovative approach to satisfy their valued customer.

We look forward to providing dynamic solutions of the mentioned problem for Swedish Trade Federation that would bring good results for retail businesses in Gothenburg. Consequently consumers must be benefited to buy high volume merchandises from several stores of the city center and this will only be possible when parking problem will be resolved.

1.4. Limitations

Our aim of the thesis is to focus on the retailers in the inner part of the city, which means that all the retailers outside the city center is excluded from our analysis and empirical studies. However we cannot focus on all the retailers in the downtown area, instead we will emphasize our study on those retailers who are truly affected by the car parking problem, and that is the retailers that sell high volume merchandises. Our main priorities are the retailers that sell electronic device, furniture, and other products of high volume, due to the fact their customers need their cars to purchase and transport their products. However with the new restriction of car travelling in the

city center and the reduction of the parking space, these retailers will most truly be affected by these reforms.

When it comes to which area we will focus on, we aim to center our attention in the central part of the city, which means Nordstan, Avenyn and inside the moat. Here below, with the help of the map and the red marked area, we would like to give a visual picture to the reader of which part we will focus on.

Figure 1.1: The area we focus for this research *(Source: www.eurotourism.com).*

We think that we also need to give an insight in how the local busses and trams could be used in a more efficient way so that they will be able to meet the customers' needs. By doing so, it will become much easier for the potential customers to shop in the inner parts of the city. Due to the inner city parking and road changes, the trams and busses have to meet the customers' demands if the retailers will have a chance to survive. Today many parents want to use their cars when traveling to the inner city, because of the simple reason that they do not feel it is so easy and

comfortable to bring their children with the local transportations services. What will happen with these customers when the car restrictions will be implemented?

When it comes to the customers, we do not really feel the need to exclude any particular customer group. We all; students, parents, elderly people, handicapped, need to buy electronic goods, and are affected by this issue and so we do not see any reason why we should just focus on one particular group or another. If there will be a reduction of parking space in the inner city, it will affect all the customers, but the impact on the retailers will however be different.

1.5. Outline of Thesis

This dissertation consists of seven chapters. Figure 1.2 represents the interrelationship and sequence of one to another chapter.

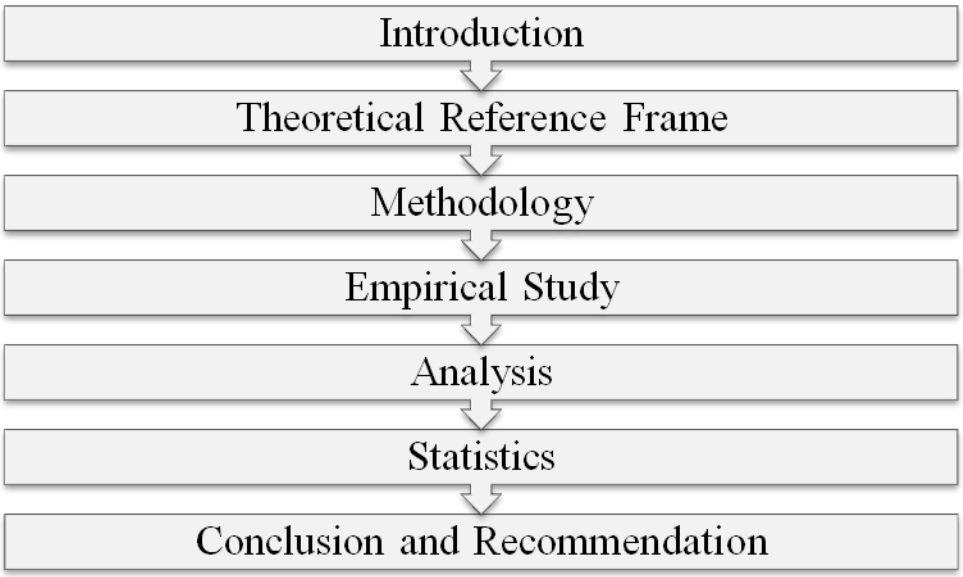

Figure 1.2: Thesis outline *(Authors own model).*

The introduction part of the thesis provides useful information about problem background, problem definition with sub questions of research. Besides, purpose and limitation of the thesis are available in this chapter.

The second chapter is Theoretical Reference Frame consists of previous studies, theory selection, distribution heuristics, direct delivery distribution, direct distribution system. Firstly, a previous study shows the study on Gothenburg infrastructure, comparison within different cities e.g. Stockholm and German cities, parking situation today, green traveling and so on. Secondly, theory selection deals with grounded theory, location and car parking spaces, customer and customer services and retailer. Afterward distribution heuristics, direct delivery distribution, direct distribution system all carry weight for strengthen our research.

Third chapter is Methodology; it defines selection of method, empirical material, and scientific dichotomy. As a final point validity and reliability are presented with set-backs in our empirical study.

Looking at the fourth chapter empirical study, we gathered here all important information of our interview report which was conducted both in Gothenburg and Stockholm.

In the Analysis part, the expected answer of sub-question is presented. Also, distribution channels for retailers following alternative solutions for home delivery one of the important issues for the thesis.

At the end chapter presents the conclusion of the analysis and ends with convenient recommendations for the retail business in Gothenburg city center.

2. Theoretical Reference Frame

This section sets out to insight theories which are used to find out possible solution of shortage space of car parking problem, change of the infrastructure and its effect on the retail business. More important, this chapter highlights some significant issues of the thesis namely previous studies, theory selection, distribution heuristics, direct delivery distribution and direct distribution system. All carry weight to enrich the research.

2.1. Previous Studies

We found many satisfying previous studies and reports concerning our subject which we need to mention before starting empirical study. These studies give as the necessary solid ground which we need that helps us to be able to come up with recommendations and proposals for this dissertation.

2.1.1. Study on Gothenburg Infrastructure

We got provided by the Swedish Trade Federation, a report that focused on; what kind of impact planned traffic and infrastructure projects could have on the business sector in the city of Gothenburg. This report was carried out in the autumn of 2008, by a well recognized consulting firm called WSP Analyze and Strategy.

The research study shows that Gothenburg is expanding day by day and becoming a "big city", this change create higher pressure on the city center to be able and satisfy the higher demands, that not only come from the customers and business, but also from the tourists. WSP believes that in a big city region, the accessibility to the inner parts of the city is very important not only for the city but also for the whole regions attractiveness and rapid growth. At that moment the local traffic has a good accessibility to the central parts of the city center; however, the busses, trams and boat journeys are very slow and fail to deliver when it comes to quality-standards outside the city center. To deal with this issue, the city of Gothenburg has come up with a plan called K2020, with the main goal to boost the collective travelling from 24% to 40%, until year 2020. By a numerous of changes; for instance, creating more "express lines" which will speed up the travelling, and develop the credibility for this type of travelling, they would like to changes

people's behavior in travelling which means less car journeys and much more collective travelling. Another plan which may affect the car-traffic is the fact that city of Gothenburg wants that the trams and busses will have their own "roads" for use. However, before they can start with the infrastructural changes (to restrict the car traffic in the inner parts of Gothenburg) they have to ensure that the travelers will be offered better transportation alternative by improving the collective travelling *(Source: WSP research, pp. 7-8, 13).*

Just to give a picture of how many journeys (cars and public transportation services) passes through the city center every single day, according to the SCB (Statistic Central Bureau) approximately 700000 *(Source: WSP research, pp. 28).*

The second infrastructure plan that Gothenburg wants to implement, is the reduction of traffic. According to WSP this kind of change will have a positive impact on the city's attractiveness and on the retailers. Though, if this plan has a successful outcome, it would depend mainly on the parking spaces accessibility and location. They also admit that this kind of plan might have negative impact on those retailers that sell high volume merchandise, in which their customers are dependent on their cars to transport their products to own location (*Source: WSP research, pp. 8).*

According to the measuresof consulting firms, most visitors of the city center use the collective transportation services as travelling alternative. To the Avenyn only 9% of the visitors travel by cars, to Nordstan that number is 15% and to Kungstorget nearly 30% use their car. WSP also represents that every car-customer spend 50% more money on shopping, in comparison with the customer which chooses the collective transportation alternative. We believe that these figures only confirm that the customers do not feel that the local transportation services are too pleasant to use when it comes to shopping and that there are still many retailers that sell high volume merchandises in the inner parts of the city. If the numbers are correct (that car-customers spend 50% more) it means that this group of customers are at the moment more important to the retailers then the other groups. This is something the city has to take in consideration when they implement the infrastructure changes. The customers want to visit Nordstan mostly choose to park their cars at Nordstans parking garage. On the other hand, visitors that travel to Avenyn, use mostly Hedens parking places (*Source: WSP research, pp. 9, 31).*

When it comes to the parking spaces, and how to solve the problem issue in the city, WSP demonstrates that the amount of parking locations are enough, however they should have the right prices and the right time limitations, due to the fact that this "factors" could have the same impact on the traffic as congestion charging. WSP announces that today's parking situation is not convenient for those who travel with cars to the inner parts of Gothenburg. The plan is to that the city-center should be accessible by car; however the roads do not have to be connected with the retailers and the shopping malls. In other words, the parking locations will be crucial for the retailers' survival and the city's attractiveness as a tourist place. WSP identified a problem with too many available parking spaces which are to widely spread and too hard to locate. According to their analysis, a well planned segmentation of the parking spaces would be an easy way to solve this problem. With segmentation they refer to garages and parking houses (both under and above ground). WSP analyzes potential places which are suitable for building parking houses: Grönsakstorget, Kungstorget, Stora Teatern, Heden, under Avenyn, Pustervik/Rosenlund, Kungshöjd and Vasastan (*Source: WSP research, pp. 10).*

In their report, WSP also announces that the city of Gothenburg composed a new parking policy, which the consulting firm finds very good and well balanced. Moreover, they also add some important notes which they think where significant to have in sight.

- The city does not have any plans of reducing the parking spaces in the downtown area, however they have to rearrange and divide the widely spread parking place. WSP announces that it is of big importance that the amount of parking spaces are kept, and not declined. The city of Gothenburg wants to reduce the parking places in the down town area and concentrate them at the edge of the inner parts of the city; for instance, Heden and Nordstan. However it is important that the distance of the city-center is not too far.
- Due to the fact that the city is slowly growing and that the amount of parking spaces will be the same, there must be a more effective solution for dealing with the availability of these parking places. There must be an effective way of how the car users can share these places.
- It is very important that the parking spaces are primarily kept for the customers and tourist and secondly for the employees that work in this part of Gothenburg. The

accessibility for the employees which use their cars must be deteriorating. The solution to this is to use pendulum parking spaces which could be used for the employees that travel collective.

- There must be a more effective way of pricing the parking spaces so that they cannot be used by long period parking users. Gothenburg city considers that there should be a time limit around 2-4 hours for parking spaces that are available on the streets. However WSP recommend that there should be an alternative for the long period parking spaces.
- The housing taxes must raise so that there will be a movement to the parking garages, for the residents *(Source: WSP research, pp. 16).*

According to the report, with the new parking policy comes with new arrangements of the priorities. The commercial transportation together with the health care services will have the priority to use the parking spaces, and with commercial transportation it is meant for instance waste collection, services for the real estate's etc. On the other hand, the customers and the patients will have to share on the rest of the parking places. Notice here that there is no plan for the employees, except the pendulum parking spaces, due to the fact that with the help of this new policy, they would like to create a movement for the city employees from using their cars to instead choose the local transportations services.

The new parking policy also overlooks the situation with the so called environmental cars and their priority.

- New parking permissions will only be issued for the cars which the owners are registered in Gothenburg.
- The car owners can only get resident parking issued in the district where they live.
- And there will also be some changes in the parking time, which means that they cannot use a 10 and 30 minutes parking space for 2 hours parking *(Source: WSP research p. 16-17).*

In their conclusions about the market and commerce development in Gothenburg, WSP predict there will be a higher purchasing power in the city, due to the fact that the population is growing and therefore the demand for commerce will rise. This puts pressure on the collective

transportation alternative to really be able and satisfy the users (customers, employees etc) demands. According to the consulting firm, good accessibility is of big importance if the city-shopping shall work in a proper way. With accessibility they refer to the trams, busses and parking spaces, and that they should be placed close to the shopping malls and smaller retailers. However they admit that it is not easy to predict how many new parking spaces should be created in the future, but they explain that in Stockholm and the city malls, there is one parking space for every 1 million Swedish crowns in yearly sales. On the other hand, WSP states that the car customers are only a small part of the total customers (the figure is between 10-40%) depending on place and time. The consultants also affirm that a city with a good accessibility is like a carrot for the retail investors *(Source: WSP research pp. 23-24).*

In WSP: s study notice how the business concept of showrooms (a store which only allows the customers to look at the products) started to is a concept that starts to become a very common and useful concept among the retailers and it is a "trend" which is expanding. They also observed that the electronic retailers have started to come back, because the demand for these types of products grew parallel with the less use of cars in the city-center. If we take a look at their chart down under, even if the car-use in the city-center has minimized, the neighbor areas like Torslanda and Askim, still have a place of car-users, and this is something you have to take in consideration, because a place of these people are customers *(Source: WSP research p. 26, 28).* According to their figures from 2006, Gothenburg had a 119 in sale index, which means that a place of the customers lives outside the city *(Source: WSP research p. 20).*

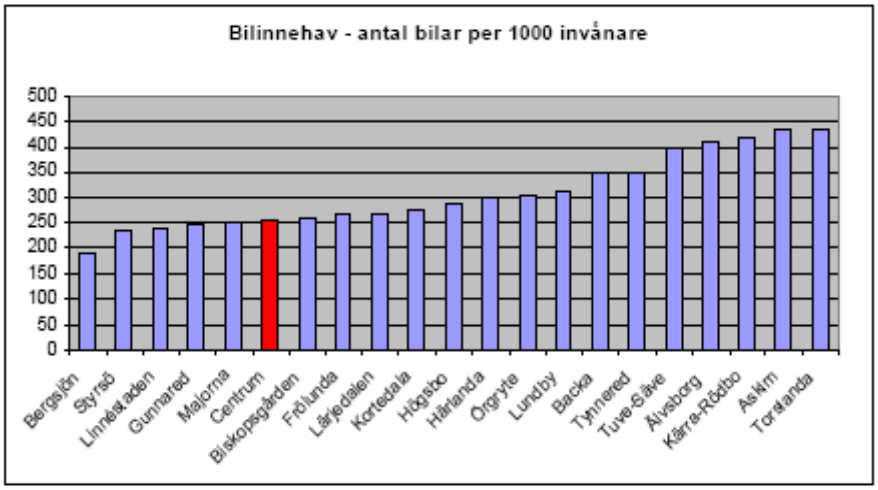

Figure 2.1: How many car users there are (amount of cars per every 1000 inhabitants) in the different city district (blue bars), compared to the city-center (red bar) in 2008 *(Source: WSP research report 2008).*

2.1.2. Comparison with Stockholm

To give their clients a good perspective of the current situation and something to compare Gothenburg with, WSP also makes a comparison with the Swedish capital Stockholm which is a bigger city (both in population and geography) and where the public transportation services are much more developed. That is also one of the main reasons why the inhabitants in Stockholm use these services more frequently, whereas in Gothenburg the people still find the car transportation as the most accepted way of travelling. However, WSP: s research demonstrate that these habits started to change, but it will take time till Gothenburg reach Stockholm's figures. Just to give the reader a picture of the difference, in Stockholm only 14% use cars compared to Gothenburg's 42%, and in the local transportation services that number is 45% against 35%. If we take a look at chart 2, on the different industrial/commercial life and social structure, we found out that there are a not such a major difference between the cities, especially between the city centers. However WSP states that Stockholm has the typical characteristics of a big city *(Source: WSP research, pp. 30).*

Also, WSP shows how the visitors within Gothenburg city-center travelled, and according to their results, most of the visitors used the public transportation services (approximately 80%) when they want to visit Avenyn *(Source: WSP research, pp. 31).*

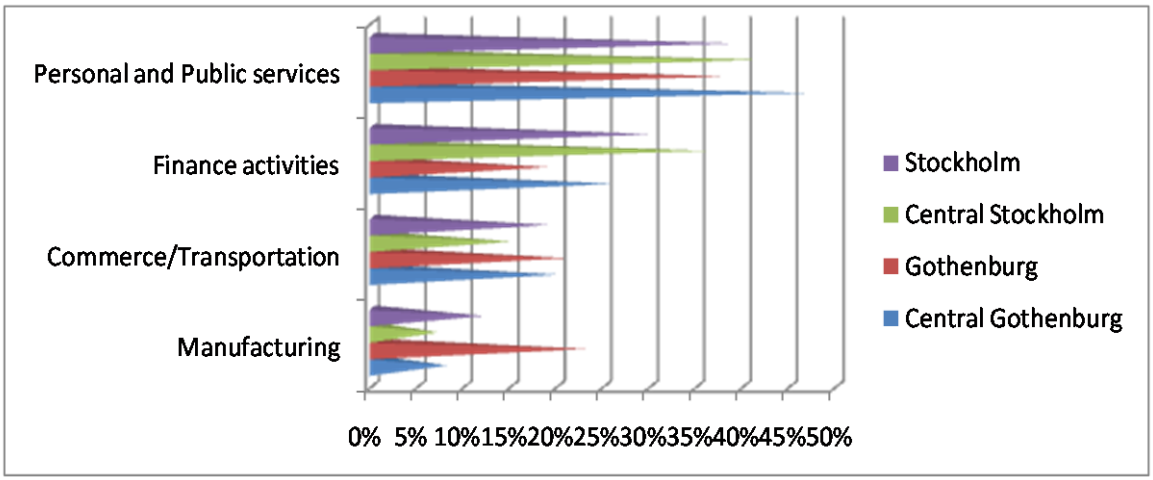

Figure 2.2: Comparison between the industrial life and social structure

(Source: WSP research pp. 30).

2.1.3. Comparison with German Cities

According to WSP: s report, usually when a city implement different kinds of traffic repressive reforms (like for instance that more people start to use public services instead of cars) the number of visitors will grow with 20%-40%. Nevertheless the consultants advice us that it will take some time until we will see these positive effects due to the fact that there will be a movement of some retailers. Those who sell high volume merchandise product usually move out from the city-center and are being replaced with retailers that can profit from these kinds of changes. They also wrote about how common it is in German cities to have no car-traffic inside the city-centers, and how they have matched these changes with segmentation of the parking places in big garage our placed them in the corners of the city-centers. With this kind of infrastructural reforms, the cities attractiveness had rapidly grown. Still they stated in their report that the customers parking possibilities and that short time parking were essential changes. The Germans accepted that they had to walk a range of 600-700 meters, from the car parking to the shops. According to WSP this range has generally been recognized even by other previous studies, where the accepted walking range for a customers is somewhere between 400-800 meters *(Source: WSP research, pp. 36).*

2.1.4. Parking Situation Today

WSP: s opinion on the parking situation in Gothenburg is not so good. They are not satisfied, and concern how the city will deal with this challenge in the future. They think that the city lack good short-time regulated parking places. For instance, Hedens parking places which are often used by city employees instead of costumers, due to the fact that the parking fees are way too low. WSP also has a concern about the some reductions in parking spaces, like the situation at the football arena "Gamla Ullevi". Their conclusions are that, the city must be accessible with car; however the car roads do not have to be connected with the retailers. They believe that with the right parking policy, there can be some positive changes in reducing the congestion and at the same time move people from their cars to the public transportation services. To WSP, it is very important that with the introductions of the parking policy also comes right balance between the parking fees, the time regulation and the right location. According to them, the fees must be so expensive that they could only be affordable for the short time users, which are the customers, and not the employees or the residents. In their report they point out a good example of a parking space which is located at Kungstorget, where there soon will be a reduction of the parking time to 2 hours parking at maximum. This change will only benefit the retailers and the customers. In total, the consultants are very satisfied with the new parking policy, but with some slight recommendations *(Source: WSP research, pp. 37).*

Concerning the collective use of parking spaces, the consultants at WSP find the solution to be very good with a place of potential; however it demands a high collaboration between the different owners of the parking places. An effective time plan of the parking use is vital if this type of solution is going to be successful. They found out that in a Swedish city called Västerås, the effective use of collective parking places reduced the establishment of new parking places with 50%. On the other hand, they admit that this solution could be even more developed, with for instance different kinds of navigation systems, which can help the employees to find the closest and available collective parking place *(Source: WSP research, pp. 38-39).*

When it comes to the parking fees, the consultants believe that a balance between access and demand can be established with a high fee on the parking places. On the other hand, they think that many retailers will lose with this kind of "fee concept" due to the fact that many customers

might choose to shop at the many different suburbs malls (e.g. Backaplan and Allum). But in their evaluation they admit that in some places; for instance, Heden a high fee is necessary to be able to replace the employees with the customers. However concerning the parking place at Kungstorget, they do not think that 2 hours will be enough for the "weekend shoppers". WSP points out in their report that an effective use of parking accessibility could have the same impact on the traffic as traffic fees *(Source: WSP research, pp. 39).*

Regarding the plans of building parking garages and parking houses, the consultants find it to be a very effective solution, due to the fact that the city will be able to remove the cars that are parked on the streets and instead use that space for other purposes. For instance, expand the public transportation and set new tram-lines or buss-lines. According to the consultants, the parking garages should be placed where there is an easy access from a larger street. They should also be placed at the corners of the city-center and not in the inner-city. The garages must be designed in a way that they are trustworthy for the customers to use. When it comes to suitable location for these parking garages, WSP believes that "Grönsakstorget" and "Kungstorget" have good potentials of creating a very good accessibility for the customers which want to use the area inside the moat. Other recommendations are "Stora Teatern" and "Heden", which can be developed into several floors of parking garage, and "Avenyn" where an underground parking garage could be built. However, these are only recommendations from WSP, and we will have to wait and see what kinds of actions the city of Gothenburg takes in the near future. But the consultants advice that some actions must be taken in a short period of time, due to the fact that the street parking spaces are continuously being reduced *(Source: WSP research, pp. 40).*

2.1.5. New Parking System in Pecs

On the internet we found a project which is financed by the European Union, called Civitas Trendsetter, whereas the aim with this project is to improve mobility, quality of life, air quality, reduce noise and traffic congestion. They use five cities as their experimental areas to try different ways of reaching their previously mentioned goals. In one of their cities, Pecs, they found out an increasing number of cars started to have a negative impact on the city, whereas the organization introduced some new parking and access regulations. The goal with this city was to implement a car-free zone and a zone-model parking system with limited time parking and

higher fees. Trendsetters report illustrates that these changes have positive outcome; with a reduction of the traffic in the city and improvements in the environmental conditions. With the establishment of the so called zone parking, it made it much more expensive for employees to use the parking places in the inner parts of the city, so more people started to use the public transportations services. Before, it was impossible for tourists to find a free parking space in the inner parts of the city, because there were no parking fees so the employees used to park their cars for the whole day. In other words, what the trendsetters did was simply to divide the city into four parking zones *(Source: www.trendsetter-europe.org).*

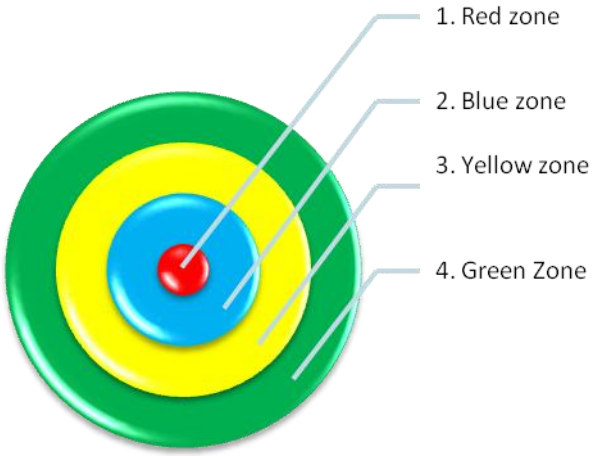

Figure 2.3: The four parking-zones in the city of Pecs, Hungary *(Authors own model).*

In the red zone, which represented the most central parts of the city, the parking fees where the most expensive and had a time limitation. The blue zone was the second parking zone in the city which also had expensive fees and time limited parking, however not so expensive in comparison with the ones in the red zone. The yellow zone had a cheaper parking compared to the blue and the red, however the green zone which surrounded the external parts of the city, the parking was free. The project also involved installation of new information signs (as the one on the picture) as well as

Figure 2.4: Information sign *(Source: www.trendsetters.com).*

increasing the amount of free parking spaces which were located outside the city-center. Due to these changes, tourist and customers had a better chance of finding free parking spaces in the inner city and the revenues they got from the parking fees and the traffic transportations, went to re-new the different transportations services *(Source: www.trendsetter-europe.org).*

This idea with different parking-zones in the city is something we strongly recommend that the city of Gothenburg look into. We know that Gothenburg is already divided in different parking zones; however, the concept has not been successful due to that the different parking places in the inner parts of the city are divided between many different owners. Today, every parking owner in Gothenburg has its own prices and time limitations which we believe only destroy the whole concept with zone-parking. For instance, Parkeringsbolaget which owns the parking spaces at Heden has a much lower price and time-limitation compared to Trafikkontoret and their parking spaces. We think there has to be a better collaboration between these two organizations, together with the more, smaller privet parking owners.

2.1.6. Access Restrictions

We would like to continue with the reports we found from the organization Trendsetters, whereas they also studied effective ways of how to reduce and limit the cars in the inner parts of the city. According to their results, four of their five "test European cities" has managed to reduce the cars by establishing green zones (or as they also call it environmental zones), or by setting up strolling zones to make the city more attractive for pedestrians. The cities Prague and Stockholm are two good examples which they mention have increased their attractiveness by the implementation of environmental zones, whereas they forbid heavy-duty vehicles to drive in some parts of the city. According to Trendsetters, the obedience level in Stockholm has increased with 96% by involving the police in the project. Trendsetters suggest that the most effective way of reducing the traffic in a city is by forbidding cars; however, they believe that it is too radical and it will only have a very negative effect on the retailers, as well as for those who live and work in the city. When it comes to strolling zones, the organization found out through their so called test cities that less traffic in the inner parts of the cities made them simply more attractive and healthier. People and tourist where also more willing to enter the city-center to shop or just take a walk. They mentioned for instance the city Graz, where with the help of strolling zones,

the businesses has boosted, and the city of Pecs where the traffic has decreased with up to 80 percent. A third method which they have studied is also the use of congestions charging. According to them it is a powerful tool for a city that wants to deal with its heavy traffic congestions and improve the mobility. It has already been introduced in Stockholm and where people that want to enter some parts of the city have to pay a fee *(Source: www.trendsetter-europe.org).*

2.1.7. Carpooling in the City of Lille

In addition, Trendsetter shows an example in the French city Lille, 2200 employees in Lille Metropole travelled to work with cars every day, even if they already have 500 vehicles for their disposal. The organizations wanted by encouraging the employees to use carpools which would reduce the traffic congestion in the city, instead of traveling by their self in their own car. By offering the employees much easier way to plan their travels through intranet, enlarging the fleet with gas- and electricity vehicles which could be used both for work and free-time and much more the company managed to reduce single car-users. Today many other private companies are following this example *(Source: www.trendsetter-europe.org).*

2.1.8. Green Travelling

The University of Dundee made a survey concerning how the University employees and students traveled to the University. This survey granted them valuable information concerning the travel distances and how people reacted to new and alternative ways of travelling. They managed to come up with a "green travel plan" and a "car parking strategy" for the University's city campus, which we found to be very interesting and useful for our thesis. Like the University, we feel that retailer's owners could also introduce a green travel plan. The University introduced a plan where the employees that used cars, should at least one day each week use the public transportation services. With this kind of plan, they had noticed a reduction in car usage with 20%. To illustrate, in Gothenburg the students and the University staff saw the public transportation as being unclean, unreliable, and uncomfortable. According to their survey, many choose the car due to the fact that they needed to bring a place of materials to work, so it was much more convenient. By implementing the Green Travel Plan, the students and employees, had to find other solutions and alternatives of traveling, and not drive alone. The aim with this

plan was to slowly reduce the pollution and traffic congestion, which would increase the students and employees health and security. Besides the reducing of single occupant car journeys, the University's parking fees rose, just to a level whereas the parking users felt that it was too expensive to park *(Source: www.dundee.ac.uk).*

2.2. Theory Selection

This section represents some theories which we focus and use in our study. These theories and concept give us necessary "ground"; so that, we can confront to the number of retailers to get clear scenario of the problem and choose to focus on our research.

2.2.1. Grounded Theory

We accept as true that Grounded theory is the most suitable science theory for our study, due to the flexibility and freedom it gives us. We are well aware that we can also use other scientific theories; for instance, Phenomenology. However, we do not think that this theory gives us specific "edge" we need to create in our thesis. When we look up Grounded Theory in the Swedish national encyclopedia, we found out that the purpose with its concept is simply to be able and create new theories. It differentiates itself from the other science theories by its way of collecting and analyzing data at the same time. The collection of data in the initial phase is done without any previous knowledge or preconceptions; instead we will create our own "vision" and theory parallel with the gathering of more data into our study. By working in this way, our collection of data will be influenced by the constantly new ideas we will develop through time. When we also compare the data we collect, our theory will become more realistic and comprehensible. This is exactly how we aim to work with our thesis. By interviewing different retailers and compare the results and answers, we will be create our self a picture of how the new infrastructural changes will affect the retailers and in which best possible way we can help them. In other words we need to understand what they really need, so it would be possible for us to come up with different proposals and recommendations. With the picture under we want enlarge the readers understanding in how exactly we aim to work with this concept *(Source: www.ne.se).*

Figure 2.5: Concept of grounded theory *(Authors own model).*

The authors Alvesson and Sköldberg state that the Grounded theory is the most common and recognized theory when it comes to creating quality-based research, due to the fact that the theory is very broad and extensive *(Source: Alvesson and Sköldberg 2008).* However on a webpage which is fully dedicated to the concept of Grounded Theory, we also find very useful information concerning what effects this scientific philosophy may have on our thesis. According to the writers, Grounded theory is neither a deductive or adductive methodology, instead of inductive. They also explain that it is wrong to see this theory as a qualitative method, because it is a general method. This statement totally dismisses Alvesson and Sköldberg previous statement. That is also one of the reasons why we feel that this theory is the most useful for our study, due to the fact that it gives us that necessary mix between quality and quantity which we find is necessary for our subject *(Source: www.groundedtheory.com).*

On the further search for information, we found on Internet a very useful description made by Southern Cross University Management School, how this theory could be applied on our thesis. Authors declare that Grounded theory focuses on a specific research situation; such as, with our issue concerning the problem with parking spaces and retailers. Our task is to confront the situation and figure out what is happening and how the different "players" deal with this issue. In our project we already know about what kind of plans the city of Gothenburg have due to the previous reports; however, what we do not know is how the retailers feel with this new reforms and if they would like to influence the outcome. By observation, dialogue and interview we can collect that necessary data we need to be able and come up the necessary proposals *(Source: www.scu.edu.au).*

On the other hand, another webpage we found some other information concerning the Grounded Theory which we thought would be helpful for our thesis. According to the author, when applying the concept of Grounded Theory everything starts with asking, why different people choose to act in a certain way in a specific situation. In other scientific orientations usually start up with already having a theory which you want to try and see if it really applies on the reality; though in Grounded Theory take the other way around. You simply start up with focusing on the situation and its surroundings and then by collecting enough data you start to create yourself a theory. In other words, it is all about turning data and information to theories instead of testing different hypothesis. On this internet page they also alert us to be careful not to fall in some usual mistakes which many do by using this concept. We should not be so fast and lose our patient so that we first create ourselves a theory instead of letting the process give us the needed theory. Also author informs, we need to trust the theory and not try to mix it with other theories because then the result might turn out to be a total failure. We also have to be careful not to collect too much data in the initial phase, because then it will only be difficult for us to compare the different data we have gathered from the different retailers and find the "hidden signs" *(Source: www.prosocial.se).*

2.2.2. Location and Car Parking Spaces

Location is one of several key words in our thesis which we think is necessary to mention, due to its impact on the retailers success. When we looked up in the book "Retail Location: A Micro-Scale Perspective" we found out it is through a good location a retailer could provide his customers the right products and services. According to the authors, they try to describe that a good location will provide the retailer a good amount of customers and therefore will increase the chances to make some profits. If the retailer is competing in a high competitive market, the value of finding the best locations is even higher, because a miscalculation on the location can have a big negative impact on the market share and the profits. The authors state that finding the right location is a long-term investment *(Source: Ghosh and McLafferty 1987).*

However we think that this description does not provide us that complete picture of what a right location really is and stands for. Therefore we found out that location is also something Levy and Weitz demonstrate as the most important decision a retailer may take, for a several reasons:

1. The store location is the first thing a customer takes into consideration when it comes to choosing if its worthy to visit the retailer or not. To support this statement they use the example with the car wash, whereas they believe that the you always choose the car wash which is the one closest located for home or work.
2. Their next statement is that location can also be used as a strategic weapon to gain some competitive advantage over your rivals, because location is not something a competitor can easily copy. To copy price-settings or product offers are relatively easy to cope but choosing a location on the other hand is a long term and high cost investment. A retailer can always find a good location, however factors as high rent, complicated leases and high cost fixtures can make it very complicated and expensive for the retailer (*Source: Levy and Weitz 2001).*

Further one Levy and Weitz also point out there are typically three basic locations/sites which retailers choose, and that is either a central business district, a shopping mall or a freestanding location. Many retailers choose to open their stores at the central business districts due to the fact that these places always attract a place of people and customers. As we pointed out earlier in our introduction chapter of limitations, we aim to focus on retailers that sell high volume merchandise in the central business district area as well as shopping malls. However location is something we feel goes hand-in-hand with car parking, because if good location and place attract customers, these customers must have a place where they can park their cars while they are shopping. According to the Nationalencyclopedia car parking stands for positioning vehicles with or without a driver *(Source: www.ne.se).* However, we consider that today's car parking is so much more complicated comparing to Nationalencyclopedia's car parking policy. There are many different ways in how to park a vehicle or where to park. From having single-outside parking spaces to using whole buildings as an opportunity to park your car. We would like to mention Levy and Weitz description in what kind of influence well planned car parking could have on the retailing sector. According to the authors, free parking places are a problem for customers and retailers which are located at central business districts, but not for retailers which are located on a freestanding site. However, they are not definite if car parking is a problem at shopping malls (*Source: Levy and Weitz 2001).*

Another thing which affects the customers' choice of retailer is the accessibility whereas the authors try to develop further on by dividing the element into macro and micro perspective. The macro accessibility (longer distance) reflects on if it is easy or difficult for the customer to arrive to for instance the shopping mall. In other words if the infrastructure is developed it will attract the customer to come and visit the retailers. On the other hand they describe the micro accessibility (shorter distance) by focusing on the area where the retailer actually is located. For instance, if the store is visible for the customers when they arrive to the parking space, or if there is a good traffic flow outside of the store. However, the most important "micro accessibility factor" is according to the authors, the amount and quality of the parking facilities. If there are no free parking places and if there are too far from the retailer, the customer may lose their willingness to enter the store. On the other hand the shopping location mustn't have too many free parking places because then the customers might believe that the stores are total failures. When it comes to deciding how many parking spaces are enough for a site, the authors use a standard rule of thumb, which is 5.5: 1000. It means that five and a half spaces for every thousand square feet of space. If we recalculate it in meters it will be five and a half spaces for every 300, 4 square meters of space. Congestion (both concerning people and traffic) is another factor which they also mention as a very important factor and in direct relation to free parking spaces. The authors write that if there is too much congestion then the customers can become irritated and not choose to shop at all. But as the situation was with too many available parking spaces, it is also not good to have no congestion at all. Instead a well balanced level of activity at the location creates an excitement *(Source: Levy and Weitz 2001).*

When we look up in the book called Retailing from the 1988, the authors Mason, Mayer and Ezell wrote about how retailers could make their own traffic investigations. According to them, counting the traffic flow at a certain location can be a vital information factor for evaluating if a place is suitable or not. It is all about counting how many pedestrians and vehicles (which are seen as potential customers) are passing at a certain place. It is also important to notice what kind of "potential customers" there might be, and not only count them. At first they mention that the retailers should focus on counting those customers which might be their customers; for example, a shop that sell men wears should focus on how many men are passing etc. The time perspective

is also of a big importance, in other words when do these potential customers pass the site? The authors wrote that when one chain organization tried to calculate how many women of the total people traffic flow where potential customers, they found out that those women which passed the location between 10 am in the morning to 5 pm in the afternoon where the most serious customers. This information is according to us very important, because if the retailers know when most of the potential customers are coming to the store to shop, then they also know at what time there should be free parking spaces for the customers. According to the authors a retailer should also know how many of these women might have the financial possibility to actually do some shopping. They write that there might be only 10 of 100 women which might actually have the economic possibility to shop. But this is something which the writers stat how much experience a retailers have. If a retailer has a good and large experience, he or she will be able to do more accurate counting. All this information could be gathered by simply randomly stopping some customers and ask them what the purpose with their trip is *(Source: Mason, Mayer and Ezell 1988).*

The reason why we choose to point out these factors which mention above (traffic account, target group, financial possibility), because we believe that these are strong factors for determining if a location is profitable or not. For instance if a high-volume electric merchandise retailer know how many potential customers pass at a certain location and with what kind of vehicle they are passing, the retailer can estimate if it is necessary to have a big parking space or if they should focus on having just a "show room". Let's say that many of the customers pass with bikes, then there are less chances that the retailer might sell any high volume merchandise, such as, TV-screens, because the customers cannot transport them to their home. Therefore the retailer might instead focus on designing a store which will work as a showroom, whereas the customers can only look at the products which are offered and then get their products distributed through the retailer's transportation service.

What we know so far is that, according to Gothenburg city's webpage, there are approximately 158000 car parking places in Gothenburg, in which the community has a direct responsibility over. Of these 158000, the traffic-office have the responsibility over 11000 car parking places that are charged and 15000 car parking places that are time regulated. On the other hand, the

"Parkeringsaktiebolaget" has the control over the 132000 car parking places that are in parking garages and land buildings *(Source: www.goteborg.se).*

2.2.3. Customer and Customer Service

According to the Nationalencyclopedia Customer is a human being which purchase or use a service (www.ne.se). However, we think this description does not contain the necessary words which exactly describe what a customer is. For instance, it only describes the customers as a buyer of services, but they seem to forget that there are also products available on the market which customers more often buy then services. Similarly, they might see the products as a type of service. They also seem to forget that in some cases, the customers are even included in the production of the product or service and are not only supposed to just purchase it.

Levy and Weitz continue their focus on the subject by adding and describing what customer services are! In their book we discovered that customer service is an amount of retail activities which adds value to the customer when they purchase a product. They state that all the employees and the elements of the retailing mix are highly involved when it comes to adding value to the customers' satisfaction. The authors try to convince the reader by setting up an example where they describe that the employees in the distribution center are involved in the customer service by guaranteeing that there are always products ready to be distributed to the customers when needed. Also, Levy and Weitz illustrates that good customer service could give a retailer a strategic advantage towards their competitors. Good service makes the customers return to the shop and starts up a positive word-of-mouth communication. For a retailer to create their self a sustainable customer service advantage, the authors recommend two approaches:

1. **Customization Approach** – by offering the customers a chance to pick their services they need and want, the customers might feel important and highly prioritized.
2. **Standardization Approach** – by guaranteeing to customers that they will always be provided a set of services every time they are interested in shopping.

Another interesting fact is found from Levy and Weitz book is customers base their conclusions if a retailer offers good or bad services by their perceptions. They use the exhibit down under to explain how customers evaluate retailer's services.

Tangibles • Appearance of store or website • Display of merchandise • Appearance of salespeople	**Access** • Download speed of website • Short waiting lines • Convenient operating hours • Convenient store locations • Providing information on order status
Understanding and knowing customers • Providing individual attention • Personalization of website • Recognition of regular customers • Notes and e-mail sent to customers informing them of sales and new merchandise	**Competence** • Knowledge and skill of employees • Depth of information provided on website
Security • Feeling safe in parking place • Describing security of Internet transactions • Stating policy about confidentiality of customer information	**Responsiveness** • Returning customer calls and e-mails • Giving prompt service
Trustworthiness • Reputation for honoring commitments • Guarantees and warranties • Return policy	**Reliability** • Accuracy in billing • Delivering merchandise when promised

Figure 2.6: Evaluation of retailers services by Customer *(Source: Levy and Weitz 2001).*

According to Levy and Weitz, the most important and critical step when it comes to provide the customers with good service is of course to know what exactly their demands and needs are. This lack of vital information can lead to taking wrong decisions. By collecting data from the

customers, establish a better communication with the customers and create a better understanding, you can always be one step before the customers when it comes to providing the right services. This is of course something which is of great importance when it comes to our retailers in Gothenburg, and for us to gather enough information so they are able to establish a better understanding in how to deal with the upcoming demands from the customers with the implementation of the new changes in the Gothenburg city center. However, Levy and Weitz point out that these changes in the customer services cannot be implemented if they are not backed up by the top management. Top management must realize that changes are required and that there might be some increased costs with the new services. But in the long run these new improved services will eventually create profits. On the other hand, they also explain that top management might only set the standardizations for service quality; however, it is up to the store-manager to accomplish these changes. By providing bonuses for those employees which offer good service to the customer is one way of implementing the new services *(Source: Levy and Weitz 2001).*

If we on the other hand look at the author Christian Grönroos, he states in his book Service Management that the customers do not really purchase the products or the services, instead the customers buy the benefits which come with the products or the services. Briefly, the author tries to say that it is important to focus on which customers demands need to be satisfied if you want have any profit as a retailer. In his book he also draws a conclusion that the customers do not really wish to have the product or the service in itself, instead the customers wants a solution which will improve their own value creating processes *(Source: Grönroos 2004, pp. 14)*. The reason to choose the argument Grönroos in our thesis is due to the fact that the problem with car parking is one of those things which the retailers should have in mind, as one of several things which adds value to the value creating processes.

We also found another description from the Oxford Reference where Jonathan Law describes Customer service as: "*The services an organization offers to its customers, especially of industrial goods and expensive consumer goods, such as computers or cars. Customer services cover a wide variety of forms, including after-sales servicing, such as a repair and replacement service, extended guarantees, regular mailings of information, and, more recently, free phone*

telephone calls in case of complaints. The appeal of a company's products is greatly influenced by the customer services it offers" *(Source: Oxford Reference online Premium).*

Why we choose to involve the theory of customer service in our thesis is because of the reason that, to be able and offer the right set of service to the customers is a very important question for our retailers today, due to the high level of completion on the Gothenburg market. There are many competitors involved, big retailers as well as smaller "players" and when infrastructural changes will be set in to action (which will create a new play-ground for the retailers) this question becomes even more important. The new segmentation of the parking spaces and the new restrictions of car driving in the inner parts of Gothenburg, change the set of services which were previously offered by the retailers. Maybe the customers cannot buy any more a large furniture, because their cars are parked far away from the store, which means that the retailers have to offer them a new solution to their problem if they want to keep their customers. The reason why we wanted to use the exhibition above in our thesis is because of the fact that, those factors could be highly important to develop if a retailer loose a service which, they no longer can offer to their customers. In other words if our retailers cannot offer their customer the parking space which they previously wanted, then they are obligated to offer them another service which might compensate the loss.

These theories about customer service go hand in hand with another important concept. There are many different ways in how a retailer can calculate if a location is profitable or not, by using some international recognized calculating methods. One of these models which we believe are important to mention is Reilly's Law. This model tries to describe the attractiveness between cites, shopping malls, stores etc. It tries to answer, how strong attractiveness does the two sites have, when it comes to attracting a customer which is positioned in the area between them *(Source: Levy and Weitz 2001).*

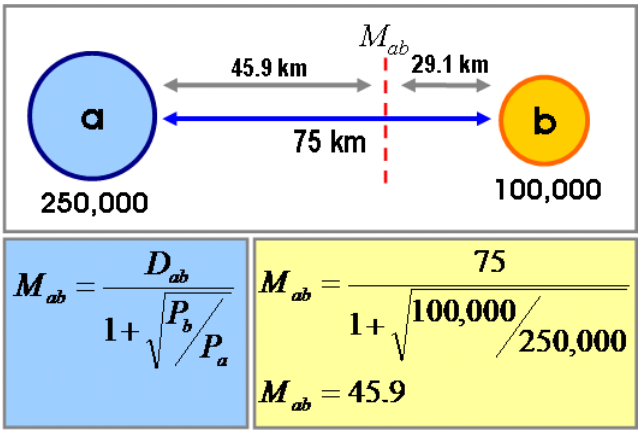

Figure 2.7: Reilly's Law

(Source: http://people.hofstra.edu/geotrans/eng/ch7en/meth7en/reillylaw.html).

The above picture describes Reilly's law, where two sites (stores, shopping malls etc) A and B are competing to attract a customer which is between the two places. With the model we will try to see at which point (distance) the customer either choose to go to store A or B. In other words, we are trying to find the point of indifference or so called breaking point. As we can see above, if the customer is somewhere inside the range of 29,1 km from the store B, the customer will consider store B to be more attractive then store A. However, if the customer pass these 29,1 km from store B, the picture suddenly changes. Then, Reilly's law shows the customer will feel that store A suddenly is much more attractive then store B. This model is very useful to try and calculate the competiveness between two stores and how attractive they are. However another model which we need to mention in this context is Huffs gravity model. The model tries simply to answer the question and calculate what the probability is that a customer will choose to shop at a certain store when there are others available to. The answer we get from this model is that size and distance matters in the decision. The bigger and closer a store is to the customers (compared to its rivals), the bigger the chances are that the customer will choose the bigger one store. If we compare it to Reilly's model, Huffs model involves a second factor and that is the size of store. The description of Huffs model is as follow:

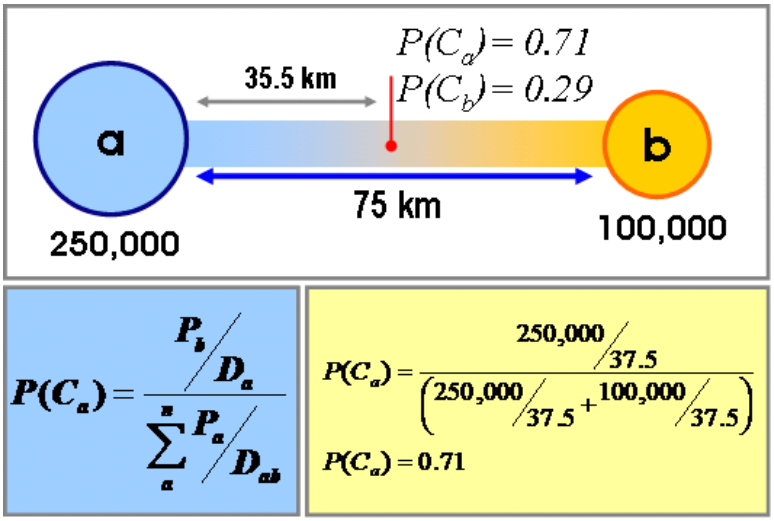

Figure 2.8: Huffs model

(Source: http://people.hofstra.edu/geotrans/eng/ch7en/meth7en/hufflaw.htm).

The model shows that the there are two stores competing for one customer. Store A has the size 250 000 square meter and Store B has 100 000 square meter. The distance is 75 kilometers between the two stores and the customer is standing exactly in the middle of them. The probability that the customer chooses to shop at store A is 0,71 against 0,29 for store B. This example shows exactly how the size matters when the distance is the same between the two stores. According to Huffs Law, the bigger a store is the more likely is it that the customer will choose the larger one before the smaller one. According to the author Levy and Weitz, Huffs model is the most ideal one because it is applicable even for places where the competition is low and where there are small amount of stores *(Source: Levy and Weitz 2001).* We also feel that Huffs law gives a much more realistic picture, because it involves the size-factor compared to Reilly's law which only relies on the distance-factor.

The reason of including this discussion concerning calculating the right location, is to feel that if retailers lack a good customer service it is even more important to have a better location then your competitors, to be able to balance up for the loss.

2.2.4. Retailer

The definition of a retailer from the national encyclopedia is a company that sells merchandise which previously has been manufactured by another producer, to other channels in the manufacturing, distribution and consumer chain *(Source: www.ne.se)*. We do not find this description to be very useful for us because as we all might know; many retailers today have also started to produce their own products and do not necessarily have to sell only other manufacturers products. This is something the authors Levy and Weitz also mention it their book whereas they write that this is a strategy which has grown in recent years due to the high competition and the need for the retailers to distinguish their self form others *(Source: Levy and Weitz 2001)*. That is why their definition is that a retailer is a business which sells merchandise and services to consumers for their personal or family use. According to the authors, a retailer is the last player in the distribution channel and therefore the link between the manufacturers and the end customers. They use the following picture in their book as a description of their theory. They further on try to develop their definition by explaining some activities a retailer carry out so that they can increase the product/service value. Activities like for instance provide the consumers an assortment of merchandises and services, holding inventory and providing services *(Source: Levy and Weitz 2001)*. All these activities we just mentioned will be highly effected by the infrastructural changes the city of Gothenburg has planned, and that is why these activities have to be taken under consideration when we do out study. An example may be perfect here, if the city is planning to restructure the parking spaces in the city, then many retailers will be affected by this change due to the fact that the customers might have a longer distance to walk when they want to visit their stores, and for that reason many might choose not to buy high-volume merchandises.

Figure 2.9: The retailer's position in the supply chain *(Authors own model)*.

A good description is found from author's book as retailing concept, which is as management oriented, when the retailers figure out about demands and necessity for market. Later on the

retailer has to redirect its business so that they can satisfy these demands but also do it in a way which is much better than its competitors *(Source: Levy and Weitz, 2001).* In other words, by interviewing them and listen to their concerns with the new changes, we might help them redirect and adapt their business, to the upcoming market changes.

In another book which only focuses on retailing, we find a model which the authors use for describing the strategy a retailer has. The authors describe margin as the difference between the cost and the selling price and the turnover is described as how many times the average product is sold at a specific year.

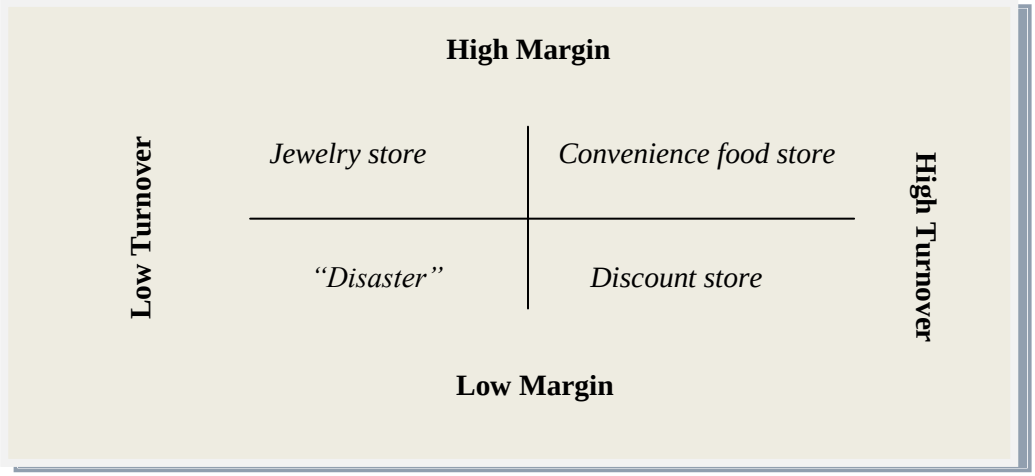

Figure 2.10: Way of classifying different business *(Source: Mason, Mayer and Ezell, 1988).*

According to the authors the retailers that are found in the square Low Margin – High Turnover, are usually retailers which:

- Offer very few services or "non-compulsory charge" services.
- Are located at isolated sites.
- Have a very basic organizational characteristic.
- Usually has large variety but small assortment of products.
- Offer their customers a price which is below the market level.

On the other hand, retailers which can be found in the other corner of the matrix are usually retailers that:

- Offer their customers many different kinds of services.
- Are located at places where there is a place of shops.
- They have very complex organizational characteristic.
- Offer their customers a small variety but large assortment of products.
- Sets the price for their products above the market level *(Source: Mason, Mayer and Ezell 1988).*

We admit that we really find this theory (matrix) to be very out-of-date, because places of things have changed since the late eighties when this book was written. However, we choose to write about it, because we find another matrix, which is much more new and up-to-date. This matrix describes different kinds of shop positioning strategies and what kind of different retail-formats could be identified with these strategies.

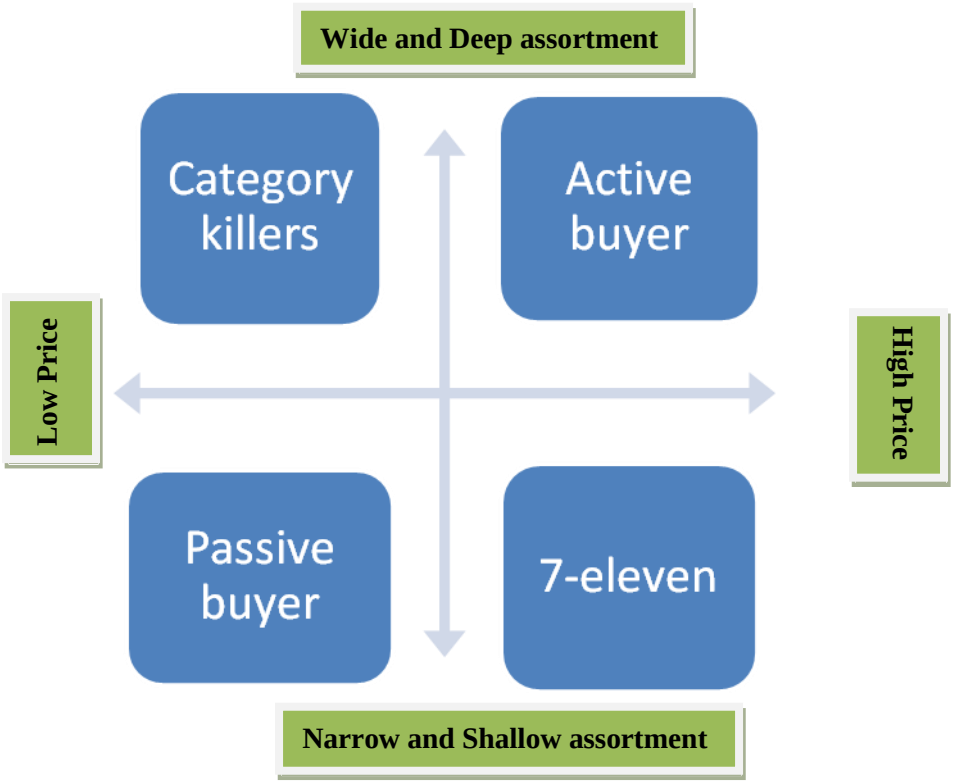

Figure 2.11: Matrix of different shop positioning strategies *(Source: Öberg, Martin lecture, 2009-02-04).*

The mistake is seen is to locate in the center of the matrix, because nothing is good really at anything. In other words if it is located in the middle of the matrix, none is offered to the customers which stand out from the other retailers. If a retailer has a passive or active buyer behavior, the characteristics can be seen here down-under.

Passive buyer behavior	Active buyer behavior
• **Low price** • **Low service** • **Large shops** • **Low rent** • **Good parking** • **Standard products**	• **Deep assortment** • **High service** • **Nice shops** • **High rent** • **Good neighbors** • **Important products**

Figure 2.12: Different buyer behavior *(Source: Öberg, Martin lecture 2009-02-04).*

The reason why we brought up the passive and active buyer theory is just because we think that it complements the matrix above and we feel that it describes exactly our retailer's characteristics. Our retailers which are located in the city center are in general active buyers. They have a deep assortment of their products they offer but they also give high service to their customers. They also focus on having nice shops at a good location and with that comes a much higher rent compared to those who choose to locate themselves outside the city center. But we can wait until the interviews and observe if this theory really is true or not.

2.3. Distribution Heuristics

2.3.1. Introduction

At present many retail businesses of the city center face several problems; one of them is reduction of car parking place. As a result a good number of customers are reluctant to come to the city center for shopping due to the problem, because they need to use private car when coming to the city center. After that they do not get enough available parking places to park their car. Similarly these retail businesses are losing their family customers who come together with family by driving car. The main reason is shortage space of car parking. To minimize the mentioned problem the distribution system may be improved by implementing a framework

called customer channel requirements consisting of two magnitudes; customer density and customer support need are introduced.

2.3.2. Generic Structure of the Distribution

The aspect of number of echelons shows the closeness of the producer to the consumer. The shipment can be done from the factory directly to the end user; to shorten the distance between producers to customer. The structure is called direct delivery as it has no storage points or inventories between the actors involved in the distribution process. In general the system is classified in two ways depending on storage points. To illustrate, the structure with two storage points is called dual-echelon structure and structure with at least three storage points is well known as multi-echelon distribution system. It is significant to mention that the number of echelons with an own inventory define the physical structure of the distribution system. In addition, the distribution structure cannot be shortened depending on the possible ownership of successive echelons; for example, vertical integration. Hence, a business owned logistics or supply chain having several physically separated storage points is not called direct but multi echelon system.

There are several researchers have expressed different definitions by using various grounds to separate between direct and indirect channel of distribution. These are as follows:

Root (1964) stated that "*the main basic distinguishing feature between direct and indirect structure was determined by where the second link in the channel was located. If the second channel locates in the producers country, it was regarded as an indirect channel, whereas if the second link locates in the buyer's country, the channel was defined as a direct channel. Therefore when using independent middlemen, agents or distributors located in the buyer's country, the channel was considered direct channel*" (Source: Koster and Delfmann 2005).

Lilien (1979) classifies "*channel structures based on the percentage of equity they held in the distribution organization. Equity up to 50% was categorized as an independent (indirect) channel, whereas majority ownership means integrated (direct) channel of distribution"* (Source: Koster and Delfmann 2005).

Anderson and Couglan (1987) defined *"distribution channel structures as an integrated ("direct") one if the company used their own channel e.g. company sales force and company-owned distribution division, while contact distribution to an independent organization e.g. outside sales agents and distributors was considered as an independent ("indirect") channel"* (Source: Koster and Delfmann 2005).

Albaum et al. (1989) are consistent with the classification used by Root (1964) and stated that "*indirect exports occur when the exporting manufacture uses independent organizations which are located in the same country direct exporting occurs when a manufacture or exporter sells directly to a buyer or an importer located in a foreign market area*" (Source: Koster and Delfmann 2005).

Klein and Roth (1990) "*suggest four types of distribution structures namely, market mode, intermediate mode, domestic hierarchy mode and foreign hierarchy mode. This categorization represents three points of increasing vertical integration and commitment"* (Source: Koster and Delfmann 2005).

Stern et al. (1996) speak of channel length which in some cases correlates with the dimensions direct and indirect. Their definition for the channel length is: "*the configuration of institutions, agencies and establishments through which products move to their final users."* Their definition includes also warehouse and inventories but the channel length is not defined only as the number of levels of stocking locations *(Source: Koster and Delfmann 2005).*

In general to distribute traditional goods like, daily groceries or consumer non durables one distribution system is very popular that is decentralized multi-echelon system with several successive layers of inventory holding companies. One difference is seen between decentralized -echelon system and direct delivery system. To illustrate decentralized multi-echelon system does not apply the principle of postponement but speculates both on the final form and on the stocking location of the product. On the other hand, direct delivery system represents to supply inventory from factory (postponement on stocking location only) or direct from the production line based on make to order (MTO) manufacturing technique is applied. One of the assertions of this the MTO technique contributes to strengthen the system so that; no product is produced to be

delivered before the final customer order is on hand. However centralized distribution system is remarkable for its wider marketing area which responds well to the demand of multi-line item order customer allowing to their adequate time for deliveries from a distribution center inventory. In addition the value adding logistics system (VAL) can moderately delay both location and the final form of the product that happens after receiving customer order (ATO) and final configuration from customer; then product components and modules are assembled in order to fulfill the customer order. The strategy is quite applicable for bulky, expensive or perishable goods but also for products having changeable demand or products sold in numerous variants.

The classification of distribution structure is shown on the following table:

Structure	***Number of Echelon***	***Form Postponement***	***Geographical Postponement***
Multi-Echelon System	Several	Minimal	Minimal
Delivery from Factory Inventory	One minimal	Minimal	Maximal
Centralized distribution (MTS)	One	Minimal	Moderate
VAL (ATO)	One	Moderate	Moderate
Delivery from Production (MTO)	None	Maximal	Maximal

Figure 2.13: Five Generic Structures of Distribution *(Source: Koster and Delfmann 2005).*

*2.*3.3. Distribution Heuristics

The distribution process is closely concerned with both the demand-side and supply-side requirements need to be applied jointly to assess the best fit structure of distribution. The demand side heuristic is well known as customer channel requirements (CCR) that deals with the customer expectations on the distribution structure and it is very important issue to explain

elaborately to fulfill the objective of the thesis. On the contrary the supply side heuristics represents the competitive strategy of the firm, the product type, the time based distribution and the life cycle of the product. Every heuristic rule maintains one out of five generic structures of distribution.

2.3.3.1. Customer Channel Requirements

Customer channel requirements incorporate of two dimensions; for example, customer density and support needs. Customer density shows the function of the number of customer and their relative closeness on a given geographical area. It can be classified in three zones, such as scattered, clustered and dense market.

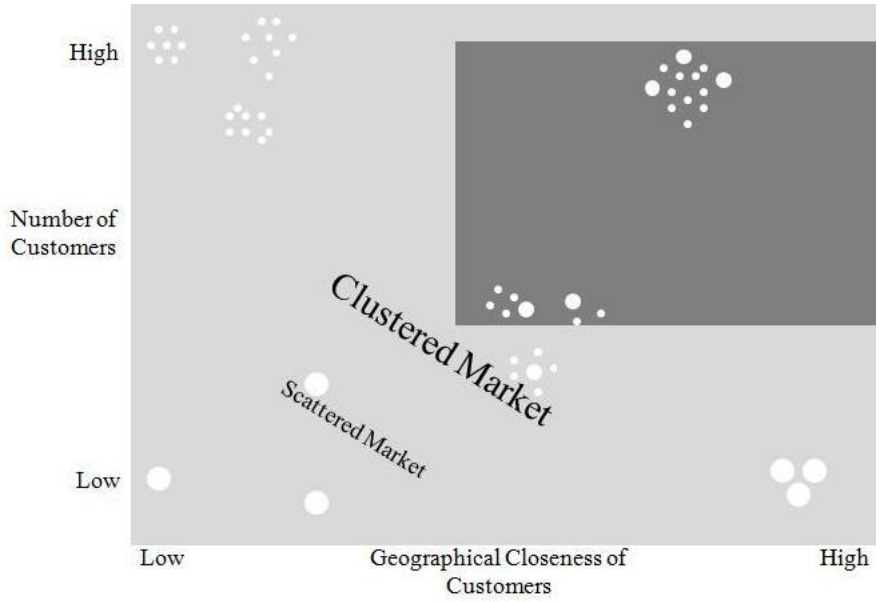

Figure 2.14: Three levels of customer density *(Source: Koster and Delfmann 2005).*

One of the assertions of this the customer support should be distinct as intensity of the supplier's engagement in the delivery process require by the end user. There are two types of support available e.g. sales support and logistics support. Sales support consists of customer service activities such as configuration, pricing, financing and warranty policy arrangements. Similarly logistics support includes of product differentiation, availability of multi-line orders, local inventories of short delivery lead times including home delivery, installing and reverse logistics.

It is shown on the figure 2.15 by classifying in three levels respectively simple, focus and multiple. To illustrate, the highest level of customer support familiar as multiple; helps to the customer for consulting with the professional salesperson when configuring the product so called sales support. Similarly, short home delivery service enhance the facility to request several line items of customized product, it is another name is logistics support.

Now we can move on figure 2.16 to match between customer density and support needs to form a customer channel requirements framework. Five generic structures of distribution process are available in the framework.

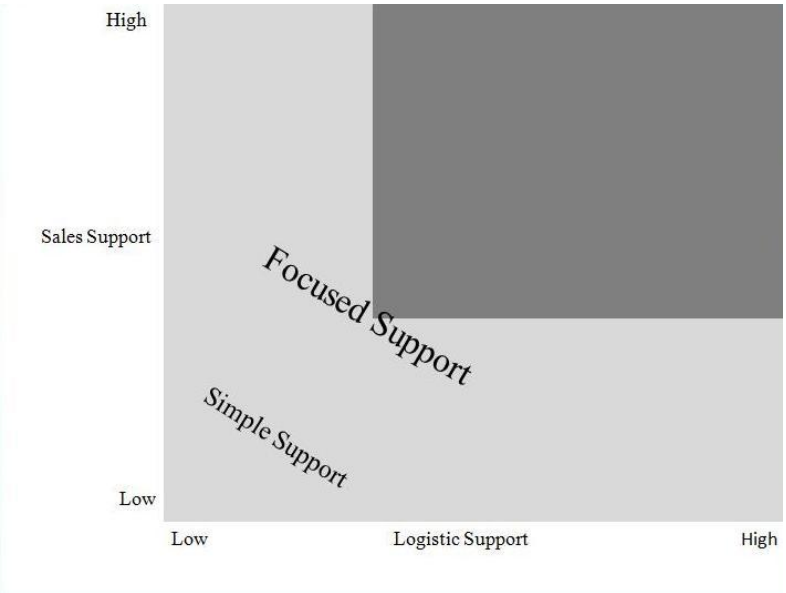

Figure 2.15: Three levels of Customer Support Needs *(Source: Koster and Delfmann 2005).*

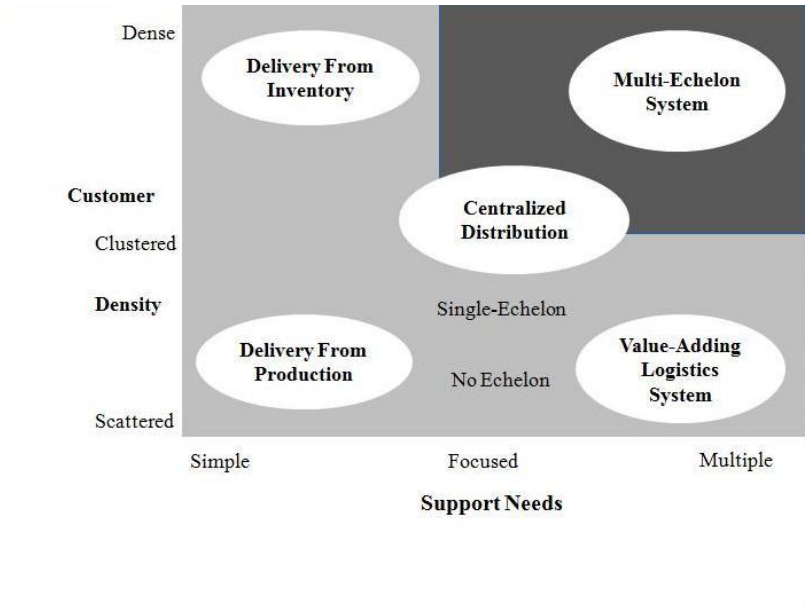

Figure 2.16: Five Generic Structure of Distribution in the CCR Framework *(Source: Koster and Delfmann 2005).*

2.3.3.2. The CCR Framework Proposes the Following Steps

- Most customers expect multiple supports (weight on sales support) from a dense market that prefers multi-echelon system to other alternative system.
- From the overall aspect of scattered market area having simple support customer needs to have short channel of distribution such as delivery from production.
- Customer of scattered market needs multiple supports which contribute to weigh logistics side to deal with the value adding logistics (VAL) system. Consequently, it would be enough competent in meeting their requirements for both the breadth of product choice speed of delivery.
- Customer of a clustered market prefers centralized system having moderate level of both types of support. In this way they can be satisfied with the wide variety of standard line items and frequent deliveries.
- To deliver products from factory to the customers in a clustered market having simple support needs this is the logistics support. It is important to make sure that satisfactory

availability from a factory inventory besides cost efficient transportation methods and adequate frequency is really remarkable issues in this process.

2.4. Direct Delivery Distribution

It is apparent that the direct delivery distribution system plays an important role in connection with one of the main objectives of the thesis. As a result consumer could be stress free from shipping related any incident after buying merchandises from stores. So the direct delivery distribution system is explained constantly on the following steps.

2.4.1. Introduction

In general distribution can be defined as the process of moving product from business to the end user. Furthermore direct distribution system is well known as physical distribution networks that implies the product is shipped to the location of customer from one or limited number of centrally located inventories *(Source: Boktaeva and Kulikauskaiteb 2003).*

Premium transport combined with superb information technology is used at the time of delivering product by direct distribution system to rapidly process customer orders and achieve delivery performance.

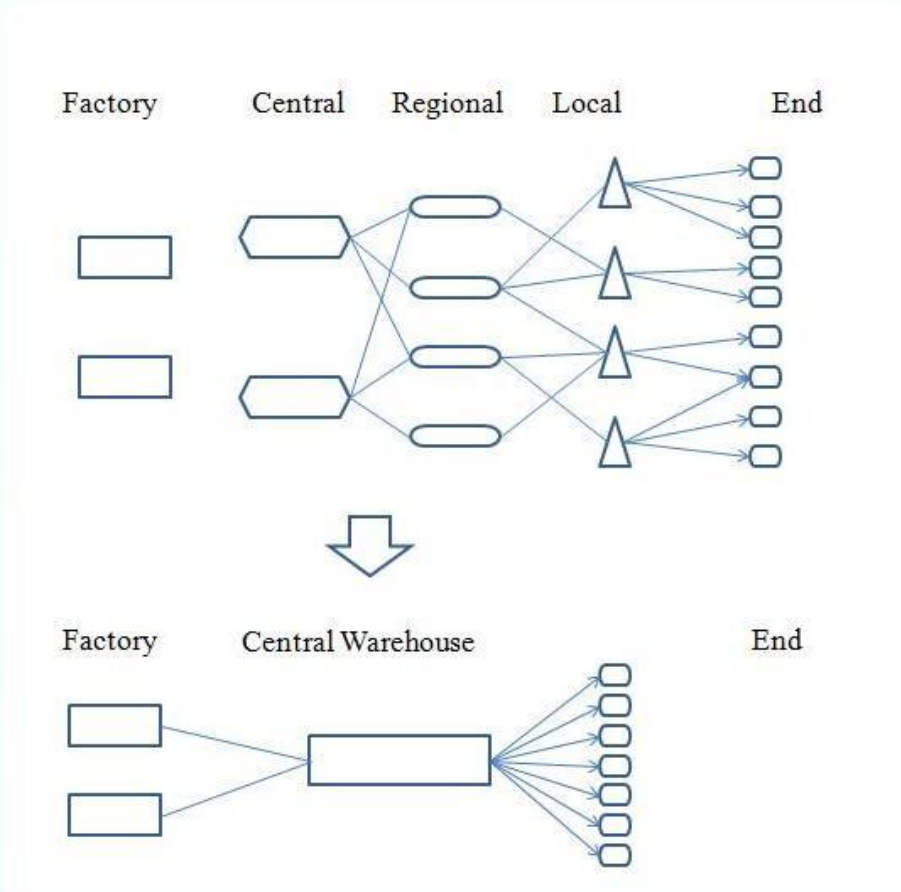

Figure 2.17: Common distribution and Direct Distribution

(Source: Cai, Mchedlishvili and Zhan, Master Thesis 2004:51; "Direct distribution for the tray business", University of Gothenburg)

The figure illustrates that the company can transport goods from showrooms or central warehouse to the end customer efficiently, which may eliminate in contacting with middle man such as local warehouse and working processing.

2.4.2. Key Benefits of the Direct Delivery Distribution System

Direct delivery distribution system may remove the customer mental stress to pick and carry product from store to their own location; it is the main objective of the thesis to make sure that shortage of car parking may not be a serious problem for retail business.

- It is possible to reduce distribution costs by avoiding local warehouse fees, manager salary and administration fee.
- This service launch different services to meet different customer demands; e.g. door to door delivery and shore time delivery services.
- The system provides quick response to the customer because of eliminating some local warehousing formalities.
- The method lessens some uncertainties in connection with customer service; such as, diminish delay that contributes to delivery accuracy.
- It is quiet important to mention that it maintain short delivery service.

2.4.3. Different Delivery Strategies

The product delivery strategies are improving day by day in order to increase the customer satisfaction as well as fulfilling business target. There are two delivery strategies that are divided into focus on the market and focus in the factory. The research study shows that many companies set up transshipment center or local warehouse beside the market in the past, well known as traditional logistics strategy. This system facilitated to response to the market and focused on products sale. The main disadvantages were found its high delivery cost which increases logistics cost. After that effective solution was found by changing delivery strategy. It is apparent that logistics academic development and saving logistics costs are very popular issues to the most companies and they like to establish warehouse beside factory. Also they follow consolidate shipping to the local center or direct shipping to the end customer. There is no doubt that the attractive issue of the delivery strategy is to minimize the delivery cost and lead time to the customer *(Source: Cai, Mchedlishvili and Zhan, Master Thesis 2004:51; "Direct distribution for the tray business", University of Gothenburg).*

2.5. Direct Distribution System

It is very significant issue to discuss, how can direct distribution system (DDS) be implemented to the businesses that can ensure customer satisfaction from overall aspects. Very important and effective discussion of implementing DDS could be found of the following states.

2.5.1. Conceptual Definition

Direct distribution is a system and process that enables direct transaction between a customer and supplier of goods or services. To do this supplier or service provider provide data regarding offering services and important information that is collected from database of selected information which helps to integrate information for review and comparison by potential customer. An efficient distribution system delivers products and services to local service and pick-up centers where the customer retrieves them, or delivers the products and services directly to the customer, depending on customer preference.

There are different sorts of system, process and methods of direct distribution system that are described below:

2.5.1.1. State 1

The system incorporates direct transaction between a customer and supplier, well known as system comprising. To illustrate good number of provider data entries regarding offerings from a plurality of providers. A software application integrating information from said provider data entries, and allowing the customer to complete a transaction directly with one of said plurality of providers. Also a distribution system for delivering product which was ordered by customer directly from the supplier said distribution system providing the customer with an option of delivery through a local business service and pick-up center.

2.5.1.1.1. Description of State 1

The software application comprises an integrated network site compiling data entries regarding products and services from a number of providers, summarized as integrated site allowing price comparison and product or service selection. Besides, the software application makes easy tracking order and order status across at least one delivery unit. Hence authorized separate

entities contribute to operate transport, distribution and warehousing, local delivery and pick-up functions. In addition, the direct transaction between customer and supplier comprises at least one distribution and transportation centre shared by a number of suppliers. Moreover the distribution system further include at least one sub-distribution center in proximity to the distribution and transportation center and at least one sub-warehouse and service center located in proximity to the sub-distribution center.

2.5.1.2. State 2

The direct distribution system enables delivery of consumer goods in a defined area, familiar by system comprising. It is a procedure of software application for tracking orders and order status across at least one delivery unit. Besides at least one distribution and transportation centre, warehouse and service centre, local delivery centre and one local pick-up centre shared by a plurality of providers.

The above system permits separate entities to manage transport, distribution, warehousing, local delivery or pick- up functions within the defined area.

2.5.1.3. State 3

The direct distribution system helps to facilitate purchase and delivery of consumer of goods from a provider to a customer. Several attempts can be taken to continue the system. For example, availability of providers, each provider having at least one provider offering; and a software application integrating data regarding the provider offerings. Also to allow a customer to complete a transaction with a selected one of said plurality of providers, tracking a status of the transaction and presenting the customer with at least one delivery option for completing the transaction.

2.5.1.3.1. Description of State 3

In general the software application presents the customer with mentioned delivery options, and the delivery options having different costs associated therewith. Besides, market of potential customers and providers are divided into a plurality of business service areas. To do this each business service area contain at least one distribution and transportation center and sharing transportation functions with at least one distribution and transportation center in another

business service area. Now turn to the sub distribution center; to comprise at least one sub-distribution center in proximity to the distribution and transportation center, and at least one sub-warehouse and service center located in proximity to the sub-distribution center. In addition each business service area consists of minimum one warehouse and service center. Furthermore, the service area can involve again local business, service and pick-up center with local delivery center whereas the customer is presented an option of picking up a purchase at a local business, service and pick up center or having the purchase delivered directly to the customer by a local delivery center.

2.5.1.4. State 4

The direct distribution system enhances the delivery service by exchanging information between the customer and provider. First of all, the providers receive information from the customer and provide the customer a tangible form or document. Besides, the provider can send only a tangible object which is a credit for a future service to the customer. It comprises a software application for tracking orders and order status across at least one delivery unit; and at least one local service station shared by a plurality of service providers.

2.5.1.5. State 5

The system facilitate purchase and delivery product from supplier to customer, whereas information can only be exchanged between the customer and the provider. In addition the provider receives information from the customer and provides a tangible form or document to the customer, or wherein the provider only supplies a tangible object which is a credit for a future service to the customer. The procedure is like a number of provider and each provider makes available at least one offering. Then a software application integrates data from said providers regarding available offerings. To allow customer to order an available offering from a selected one said of providers in tracking an order status regarding the preferred available offering.

2.5.1.5.1. Description of State 5

According to the system, it includes one local business service and pick-up center equipped to provide an offering to a customer. Similarly at least one local business service and pick-up center is shared by a plurality of service providers. There are two options to conduct the payment

system; for example, on-line payment system and in-person system at a local business and pick-up centers.

2.5.1.6. State 6

The distribution system enables delivery of a service in a defined area and that happens when a contributor receives information or a substantial object from customer. After that, contributor can deliver goods or an object back to the customer after performing service. The system makes up; a network for tracking orders and order status across at least one delivery unit; a plurality of service providers accessible through a plurality of local service stations; and at least one distribution center shared by said plurality of service providers and said plurality of local service stations for delivery of products between local service stations and service providers.

2.5.1.7. State 7

This system is used for facilitating purchase and delivery goods which is ordered from customer to provider. It is made up with availability with service provider, each service provider making available at least one service; and a network integrating data from assumed service providers regarding available services. By allowing a customer to order an available service from a chosen one of said plurality of service providers, and tracking an order status regarding the selected accessible service.

2.5.1.7.1. Description of State 7

To illustrate, a market of potential customers and service provider can be divided into a plurality of business service areas. In addition each business area operates as an independent unit and establishes its own pricing structures based on defined characteristics if a local portion of the market. To do this at least one distribution and transportation center can share delivery functions with distribution and transportation centers in another business service area. It comprises one sub-distribution center and at least one delivery center. When the customer is presented an option to pick up or drop off the product with rendered services or requiring service, respectively, at a local business service and pick-up center, or having the object picked up or dropped off directly to the customer. To continue the service provider should be located in the proximity to the distribution and transportation center or the sub-distribution center.

Furthermore from the above mentioned state 7, the service provider can segment its business area by business service area, sub-distribution area, multiple sub-distribution areas or multiple business service areas.

2.5.1.8. State 8

The direct distribution system is a method that completes transaction between a provider and customer. To do this the method comprises the correct information of customer regarding offerings from availability of providers. Also, good communication an acceptance of a selected one of said offerings from the customer to a selected one of said providers. In addition, by delivering the selected one of said offerings from the selected one of said providers to the customer through a distribution system providing the customer with an option of delivery through a local business pick-up center in a geographic area selected by the customer.

2.5.1.8.1. Description of State 8

According to the method, the customer is given opportunity to choose delivery options among many delivery points having facility that associated with different cost and payment system. Similarly the distribution system comprises a plurality of geographic business service areas and each business service area ought to have at least one local business pick-up center. It is important to mention that at least one of geographic business service areas make up a warehouse center for warehousing offerings from provider whereas, provider adjust delivery to the warehouse center based on demand within the business service areas. Also it asserts that customer receives object after delivering product by provider through distribution system and the provider returning the object to the customer through the distribution system after servicing. However, the customer has option to have the product directly from the distribution center through delivery or pick-up at the local business pick-up center. Additionally, the customer can choose different service like; customer might get delivery directly from the selected provider or pick-up by the customer at the local business pick-up center.

2.5.1.9. State 9

One of the main functions of the direct distribution system is to ensure delivery of product from supplier to customer. The delivery product is ordered by customer and the system constitutes

some issues. To illustrate, a software application is used for communicating information between supplier and customer to continue the flow of supply product and communicating information within customer and selected one of the providers concerning offering products. This kind of distribution system may include multiple business service areas for delivery product that was offered to the customer. Additionally each business service area constitutes individual geographical area having one local business pick-up center located in that.

2.5.1.10. State 10

In general, direct distribution system is used to deliver product from a large number of providers to a plurality of customer in numerous ways. To do this the system combines several issues; for example, one local business pick-up center should have modern updated system to receive offerings from a large number of providers. Similarly the system should have right track to manage everything concerning service that pick up product by designated customer. Furthermore at least one distribution center would be used to receive offerings from providers and deliver goods to the authorized customer.

2.5.1.10.1. Description of State 10

To make sure the efficient distribution system it argues to comprise a warehouse and service center. Also where a large number of customers are located within a plurality of business service areas then each business service area might combine at least one local business pick-up center and at least one distribution center. In addition it constitutes a network for tracking status of delivery within distribution system *(Source: Direct distribution system for consumer goods and services; http://www.freepatentsonline.com/y2005/0080635.html).*

3. Methodology

This section describes methodology which is associated with this research. Also it represents the strategy of collecting data and the development of our knowledge and idea with collected data to enrich this thesis. This process consists of selection of method, empirical material, scientific dichotomy, validity and reliability that provide bright picture of intending to interpret and use data. Finally a brief description is found about facing problem at the time of collecting data.

3.1. Selection of Method

We intended to take an induction method with this thesis, because of aiming to take the retailer's perspective in this problem and that is why we focused our interviews to continue research. However, we would also interview some organizations which have a big impact on the retail business. By choosing the induction model we would like to organize recommendations on the basis of our empirical studies, and not in speculations. Another reason of avoiding the deduction method is due to the fact that this model always wants to show how a "general rule" always counts. The deductive model has been criticized that it does not really want to explain or prove anything, due to the fact that it holds on its general rule *(Source: Alvesson and Sköldberg 2008).*

There is no "main theory" of how to deal with the infrastructure problems in the city, because no city is like another city. Every town has its own individuality from infrastructural side that it makes it unique in the world. In other words, we can learn from Stockholm of how to help Gothenburg in dealing with its parking problem; however, these cities do not look the same which means that every city needs its own concept or solution and not a follow a general rule. That is why, by interviewing the retailers and related organization after taking on their perspective, we believe that we can find some convenient recommendations (however not a general rule) to minimize the car parking problem.

3.2. Empirical Material

Our intentions were to collect data and empirical material from many different interviews we would carry out. As we mentioned in chapter one (Introduction chapter), we would like to focus on retailer that sell high volume merchandise at the city center. So in other words we maintained a quality-based study, where we will look on how the retailers realize with the new infrastructural plans in Gothenburg city-center, and how they would like to affect these changes. We needed to have deep and constructive conversations with the retailers, in purpose to be able to find out sustainable recommendations concerning the parking issues. Though we did not intend to interview all the different retailers' employees, instead we focused on the individuals; for instance, retail-managers, supervisors and some salespersons. They are our preference as interviewee, because they are able to realize what kind of impact changes in the infrastructure could have on their businesses and also had experienced these changes.

In addition, during our research work we realized that we need to interview not only retail business but also we need to consult some organization that monitor traffic related matter to control and manage traffic congestion and parking related issue. To do this we visited in Stockholm to meet some responsible people and collect data which enriched our dissertation. Besides we did the same thing in Gothenburg to provide enough information to the research in order to make informative thesis.

When we interviewed our retailers we used a combination between a standard questionnaire and some "open questions" whereas we tried to make the interviews more relaxing and not so standardized. The question from the questionnaire is found in the appendix. When it came for us to interview the different organization that works with these kinds of retail problems we did not use any questionnaire. Instead we gave them questions concerning how they thought about these problems and how they worked to overcome these issues. In addition we choose to take on the Grounded Theory in our thesis, our work progress in this study while we collected data from all the interviews and all the reports, we also started to in a parallel way to compare the different information or results and gradually created ourselves a perspective. By allowing ourselves to work like this, we constantly allowed for new data to influence our vision of the problem and through time our vision of the situation became more realistic and comprehensible.

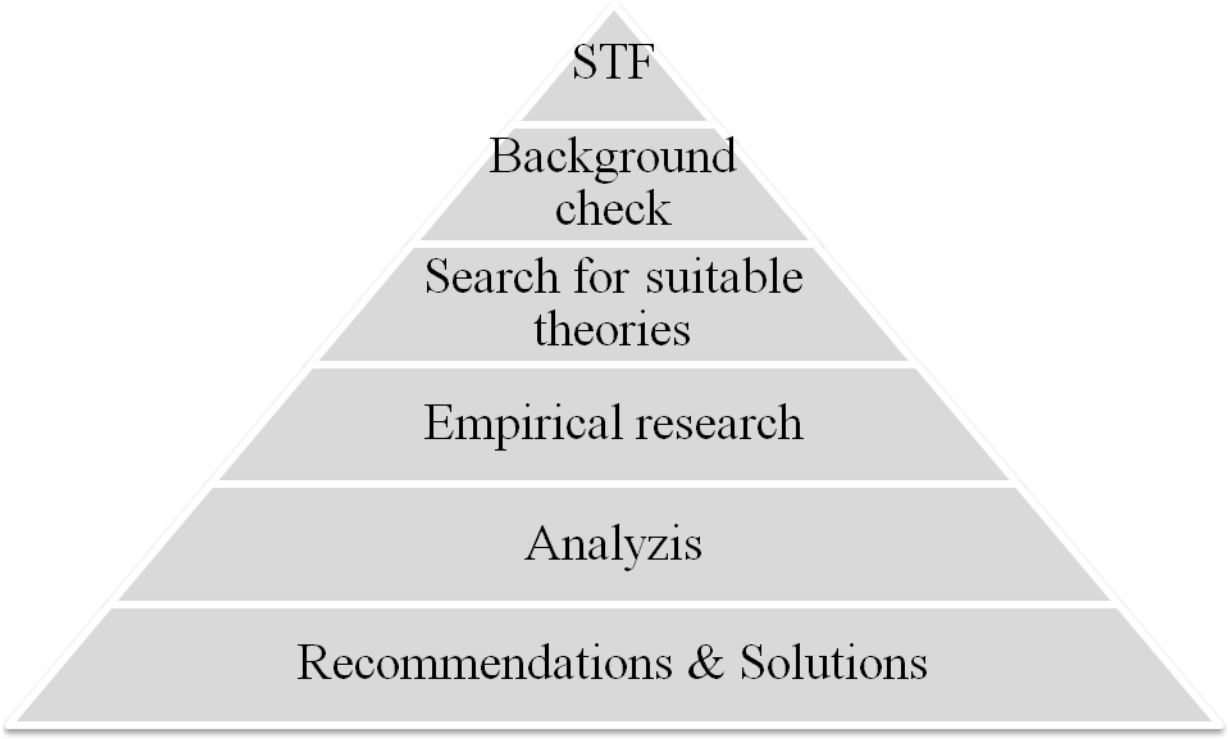

Figure 3.1: Pyramid of progress *(Authors own model).*

The above figure shows the progress and development of our study in time. At the top of the pyramid we started up with very little knowledge about our topic. When we got assigned our project by the Swedish Trade Federation, the first thing they invited us to describe the problem (car parking issue) and what information they wanted to gain from this thesis. After that we checked background where we searched on secondary data to try and enlarge our knowledge relating to our topic. When we found enough previous studies and data, we continued with the collection of useful theories which would back-up our work and give us necessary guidelines. Afterwards we continued with the interviews and collection of more data that we analyzed later with the help of our previously selected theories. Last but not least, when we were satisfied with our analysis, then we have been able to come up with useful recommendations which can be the possible solutions to our stakeholders. We decided to do as many interviews as possible till we realized that we created ourselves such a good picture of our aimed problem that we could provide our stakeholders with good solutions and recommendations. In addition, the reason of choosing to describe our working progress with a pyramid is simply, because when we started with our study (the top of the pyramid) we did not have too much about our given problem. But

as time went on we developed as well as enlarged our knowledge and understanding for the problem. At the end of our study (the bottom of the pyramid) our knowledge was so great that we could give the Swedish Trade federation our suggestion and recommendations of how to proceed with this issue. In other words the grey area in the pyramid stands for our enlargement of knowledge in our topic.

3.3. Scientific Dichotomy

Ontology is the knowledge behind of the different concepts we need to adopt to be able to develop a coherent description of the reality *(Source: www.ne.se).* In other words, ontology stands for what kind of perspective we have on the world and the reality. To illustrate, figure 3.2 shows this actuality can be divided into two categories. According to Bassim Makhloufi (Professor of Borås University), as a scientist it is possible to take on the idealistic view of the world, which means that the world is built on mental constructions, or from realistic view the world is undependable on the human consciousness.[1] We believe that a realistic view from our side was required if we wanted to be able to come up with realistic and reliable recommendations for the retailers in Gothenburg. That is why we chose to interview the retailers, so that the Swedish Trade Federation would get their perspective and be able to see the whole picture (reality).

Figure 3.2: How the Ontology is divided *(Authors own model).*

The next step in the scientific dichotomy is concerning the epistemology, which questions the nature of knowledge; for instance, what kind of knowledge do we seek. *(Source: www.ne.se)* With other words, what is our opinion when it comes to knowledge? The following figure 3.3 shows, epistemology is also divided into two concepts. Regarding our thesis subject the empiric

[1] Makhloufi, Bassim lecture 2008-01-28.

concept is the one that fit our issue best, due to the fact that the empirical concept stands for knowledge which is based on experience. And that is exactly what we aimed to do with our thesis. By interviewing the retailers and see what their opinion was with the new infrastructure plans, we wanted to provide the decision-makers with some valuable information which is based on experience. The other concept in ontology is rationalism where the knowledge is based on reason and wisdom. [2]

Figure 3.3: How the Epistemology is divided *(Authors own model).*

Last we have the third scientific dichotomy, which is the paradigm that stands for what kind of science ideal we have or in other words which pattern we choose to follow that effects our science knowledge *(Source: www.ne.se).* Either we have a positive ideal, which means that we want to focus on the thing that is positively given. In other words we believe that everything can be directly registered and measured. Otherwise we can take on an interpretatively ideal which means that we try finding out what is behind the human actions, trough and dialogue.[3]

Figure 3.4: How the Paradigm is divided *(Authors own model).*

In our study we found that the most comfortable by using the positive ideal due to simple reason that our thesis was more of a study where our aim was to collect sustainable and useful data.

[2] Makhloufi, Bassim lecture 2008-01-28.
[3] Makhloufi, Bassim lecture 2008-01-28.

3.4. Validity and Reliability

Swedish Nationalencyclopedia illustrates the term validity stands for how relevant our study actually *(Source: www.ne.se).* In others words it questions how useful our empirical research could be to other studying fields or the society as whole. The Swedish Nationalencyclopedia further on describes that validity can be seen as a measurement tool, to see if we actually examine those things which we aimed to observe in our study. When we look back on our results and what we managed to discover with our study, we are convinced that our thesis is highly valid and relevant. Valid due to the fact that we managed not only to answer our main and sub-questions but also where able to provide our stakeholder (Swedish Trade Federation) with valuable recommendations and solutions of how to possible deal with the car-parking issue. Also we can claim that our thesis is highly relevant to the fact that the car- parking problem in Gothenburg is something which most of the customers and retailers experienced. In other words, if our topic were not relevant then the Swedish Trade Federation would not have assigned us the study. As a final point, our result from this study can be useful for other students which would like to investigate or compare how other cities work with questions concerning the car-parking problem.

If we take a look on the term reliability, our resource the Swedish Nationalencyclopedia simply describes it as a test to see if the result of a study would be the same in another period of time *(Source: www.ne.se).* In other words it questions what the possibility is that we would get the same result on our empirical research if we would choose to do our study during another time. We think that our study is reliable due to the fact we choose to focus our empirical research on those retailers that sold high-volume merchandises. We think that no matter when or where we would choose to do this study we would always have received the same answers because the retailers that choose to their sell high-volume merchandises in the city-centers would always face the problem with car-parking and distribution. That is why we chose to visit Stockholm to compare the same group of retailers that we chose to interview in Gothenburg, just so we could prove the reliability in our study.

3.5. Setbacks in our Empirical Study

During our empirical research we experienced some setbacks that we may express in our thesis. To illustrate, one major electronic-retail chain in Gothenburg did not agree to participate in our study due to some personnel changes at the two stores which we wanted to interview. To compensate this loss we therefore choose to interview two other major electronics retailers. So this setback did not have negative impact on our study; however, it would have been interesting to hear their opinion on the car parking situation in Gothenburg and to see how they worked to overcome the problem.

Another thing which we unfortunately could not accomplish with our study (due to the lack of time) was to take a closer look on the real-estate owner's opinion in our problem, because the real-estate owners rent their land to the retailers it would be interesting to see if they hear some complaints from the storeowners concerning the car-parking problem in the central parts of Gothenburg. We can expect that the situation may change positively in future.

4. Empirical Study

This section illustrates our collection of data from different interviews both in Gothenburg and Stockholm. A place of information is available in this part that contributes to make good analysis in the next section. Our intention was to interview with those retailers who sell high volume merchandise. However, we interviewed with different organization; for example, traffic and public transport authority in Gothenburg, traffic administration in Stockholm and environment and health Administration in Stockholm.

4.1. Interview with Erik Eriksson - Gothenburg

Chilli is a Swedish family owned company, which sells furniture, decorations, paintings and other merchandises when it comes to designing homes. Generally Chilli offers 40% – 60% of furniture of their total amount of product. There are 11 Chilli stores in Sweden and 3 of them are in Gothenburg located at Kållered, Backaplan and Central station. Also the central ware house is situated at Kallebäck in Gothenburg.

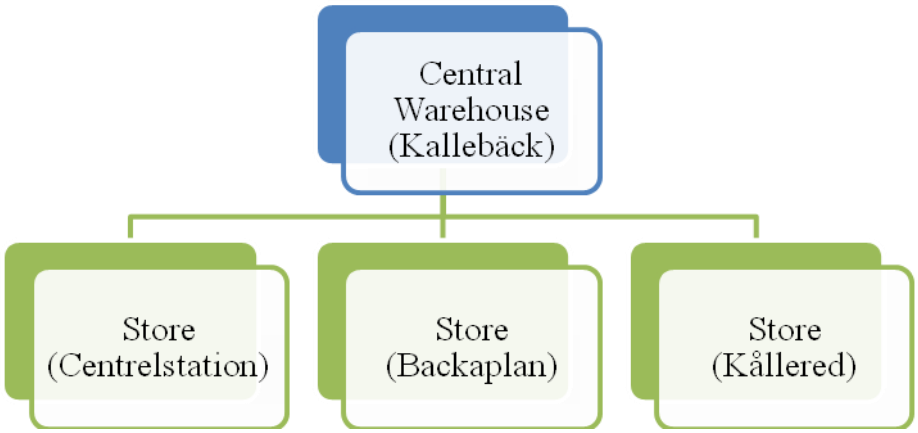

Figure 4.1: Location of warehouse and different stores in Gothenburg *(Authors own model).*

In general all furniture of the shop comes to one place in Sweden. Then furniture and other products are sent to the central ware house in Kallebäck. Most imported things are transported by container and truck from abroad. Customers visit the store and choose product; after paying the amount their selected product is delivered towards customer location from the central ware

house. Sometimes the goods are sent directly from the store to customer address. It depends on the situation and customer demand. This delivery service from store is not possible whenever the product volume is absolutely high. Then customer needs to pick the said product from Chilli's ware house or customers are sent directly goods from ware house. This delivery service costs SEK 350 (excluded with product price). However customer can collect products own self from store instead of warehouse when it is available at the store after ordering by them. But this specific service is not available always, sometimes it may happen if the customer claims this service; also depending on the volume of the products. For instance, customer might not be provided the claimed service if the volume of products is extremely high, because the product cannot be placed at the store for its limited space.

Erik Eriksson informed us that there is a car parking place at the NK-building near to the showroom. In addition, there is another car parking space located in front of the store; however, customer can use the place only for 10 minutes. This limited time is not enough for customer undoubtedly. So they try to finish shopping within the short span of time, which affect on the employees. Both customer and store staffs become much stressed that time which may not be good sign for business.

Erik provided significant information about their current problem of car parking space. To illustrate there is not enough car parking place at the central station located store. So people visit to take a look at the products and they go to the other two stores at Backaplan and Kållered to purchase their preferred product. People prefer to visit there two places rather than central station showrooms, because free parking places are available there. He further explained that some problems are seen with their selling products; for instance, good numbers of customer buy vases and paintings from Chilli and they think it is difficult to take them home when using public transportation system. As a result customers are reluctant gradually to buy this kind of sophisticated items from that store due to the car parking problem. For these reasons they are planning to move the store from its current location to another place like Sisjön; whereas they will be able to provide enough cars parking facility to their customer to strengthen their business in the competitive market. To do this they need to wait couple of years until their recent contract expires.

In addition the owner of the store expands the spaces of the store in order to customer enjoy shopping. They launched the store with 400 square meters from the beginning time and currently it is now 1200 square meters; the main reason is to increase in selling day by day. Nowadays it should be expanded more for the demand of time. But they are hesitating to do it due to the reduction of car parking place. Their average customer is about 20 – 55 years old and 80% – 90% of them use public transportation system. None of store stuff use private car during their working time.

We have been able to know customer's preferred days to visit and purchase product at the Chilli shop. Consumer likes to visit the store during weekdays on Monday, Tuesday and Wednesday and purchase product on the weekend. The store manager thinks that most of the customers are from the central part of the Gothenburg city who works around the city center. They are used to shopping during the weekend whenever they are free from their service. Sometimes many of them go to the other two stores of Chilli located at Backaplan and Kållered since enough free parking places are found there.

The aim of Chilli is to let the customer know regarding their present distribution strategy. It is very smooth system for consumers in order to complete shopping without any stress. Customer can only buy the merchandise at the store; they no need to worry about carrying products from the store. If the customer wishes then they can pick it up own self from the central warehouse at Kallebäck, otherwise Chilli provides transport facility to deliver products towards customer address. Sometimes Chilli faces difficulties to make the customer understand concerning the distribution process. After opening the showrooms at central station the overall upward trend of sell is seen despite the unavailability of car parking place. One of their business strategies is found really appreciable; that is they emphasized behind of selling blanket instead of furniture in the last winter season although Chilli is well-known for its incomparable furniture. Hence, they achieved huge amount of profit by selling blanket recently and they did not face any problem concerning the unavailable of car parking space. Also we have been informed that they are ready to concentrate on exclusive furniture in changing the market position. To sum up, Chilli is expecting convenient solution for minimizing the said problem to continue the upward trend of sell.

4.2. Interview with Björn Hugosson - Stockholm

We met Björn Hugosson during our trip in Stockholm. He works as a project manager for Stockholm's environment and health Administration. The reason why we wanted to interview him was due to the fact that he was involved with the European project Trendsetters and we wanted to hear what kind of impact this project had on Stockholm. Björn started to explain that he was not really sure if Stockholm had done much more progresses concerning the car parking than Gothenburg. He thought that Stockholm's parking policy needed to be changed as well, for instance the street parking (ground parking) is free during the day hours, but at night they charge the cars. According to Björn it should be the other way around. However he explained that the indoor parking facilities where charged, because they are privately owned and therefore expensive, people choose the ground parking's. Those who wanted to use the ground parking places during the night had to pay approximately 600 SEK. He further on explained that at the moment Stockholm has a right-wing political majority, and their parking policy is to increase the parking places instead of trying to minimize them. From a political point of view the parking policy is a very sensitive topic in Stockholm. When we asked him if the parking policy had a negative impact on the retailers, he really was not sure enough. So far they did not see any negative or positive effects. He explained however that during the rush hour around 70 % of all the trips were made by the public transportation services. The metro system was the main solutions for people to transport themselves in Stockholm.

Concerning the congestion charging in Stockholm, Björn admits that in general it has a very positive effect. Before the system was implemented many where skeptic and approximately 50-60 % where against it, because many seemed to look at it just as another fee they had to pay. But what they have seen is that people started to change travel patterns. There was a reduction of traffic with 20 %. Much of the congestion disappeared which also reduced the travel time for people with up to 50 %. People started to realize that they could predict their travel time if when they used the public transportation system. On our question if it he thought this solution could work in Gothenburg to, he thought it would not be a problem. When we asked him directly if the a congestion charging could have a positive effect on the retailers, due to the reason that more and more people would start to use the public transportation whereas more tourists and customers would have free parking spaces in Gothenburg, Björn confirmed our theory. Björn

explained that before the congestions charging were implemented many retailers were concerned that it would have a negative influence on their businesses because less people would choose to shop in Stockholm downtown area. However now they have confirmed that charging has not had any negative impact on the retailers in Stockholm.

When we further on talked with Björn, he told us that Gothenburg worked more effectively with logistic solutions compared to Stockholm. For instance, he explained that in Gothenburg they had implemented a new solution in an area whereas the cars were allowed to drive on the streets but they had to drive in a speed that was in the same paste as the people that were walking. That means it is allowed to drive through that areas to deliver goods but none can leave the car, because there are no parking places. Björn explained to us that the result with this new solution was:

- There were less cars driving and those which did not follow the car restriction where fined.
- With less car traffic it became more accessibly for the retailers to distribute their products.
- The environment became much nicer and much more people started to use this area, for instance for shopping.

Björn continued on with the parking policy problem in Stockholm and explained that they did not have any continuity because there was always a new ruling party compared to in Gothenburg whereas they have had a socialdemocratic ruling majority for a longer period. Like for instance now in Stockholm the traffic office is searching for places which they can use as new parking places. But according to Björn they really do not have a deep understanding about the problem.

When we started asking him question about new logistic solutions Björn gave us an example of how they implemented a new way of disturbing products to the different retailers in the old town (medieval part) of Stockholm, where the streets are very narrow. He explained that instead of letting every restaurant, retailer take their own car to transport their goods, they allowed a private company called “Home2you” to transport all the goods to the different stores. This way they managed not only to save time and money but also to reduce the traffic which made it much

more convenient for the “stakeholders” to get their necessary goods. He proudly said that solution was something which could be successful in Gothenburg to, especially in places where the streets are narrow.

Last but not least before we ended out interview with Björn, he gave us an advice which we thought were necessary to mention. He said that the right combination between charging and incentives is a good way of implementing a new solution in a city. In other words to get something from the society you also have to give something back.

4.3. Interview with Daniel Firth - Stockholm

We also met Daniel Firth in Stockholm, who works as a traffic planner in the traffic administration of Stockholm. The purpose with this visit was to get deeper understanding how Stockholm works with the parking and traffic issues. Daniel explained to us in the beginning that he worked in a team that had the responsibility over the strategic planning. He worked with question like; How can we use the road network in best possible way, use road space? In other words he worked with long term infrastructural changes.

Daniel told us that, the predictions in Stockholm where that the city would grow as the size of the population in Gothenburg for the next 25 years, so they have to come up with long-lasting solutions and find new space for these people. He explained that at the moment was involved in a project where they try to examine what kind of effect the congestion charging have had on the society and also how new parking places can be provided to customers. According to him there is a high demand of new parking places in Stockholm whereas they not only try to find new places to build parking houses but also see if any of the today’s loading-spaces which are used by the trucks, can also be transformed into parking places. However Daniel admitted that the possibility to accomplish that is extremely limited, because the commercial need that space. Daniel explained that they have a political objective to increase the parking spaces in Stockholm. But in the same time a parallel objective and that is to steer the parking away from street parking’s to the garages.

Daniel further on explains that they do survey every second year just to see if the demand for parking places is shifting and how the present parking is used. In the latest survey they found out

that only 10 % of all the parking places where vacant, which means that during the daytime Stockholm does not face any serious problem. However during the night the picture is totally different, whereas the residents have difficulties in finding free parking spaces.

When we started to ask him questions about the congestion charging he explained that the numbers of cars entering the city-center decreased with 20-25%. This had a positive effect on the public transportation, because it reduced traveling time with 30-50%. However when it comes to what kind of effect it has had on the retailers, they could not actually find any negative effects.

When we asked him if they got any complaints from the retailers, that there are not many free parking places in the city, he said that it is a common problem of every city. According to him there are available parking places for the customers to use in Stockholm; however, at a cost which they do not want to pay. Most of the parking in the commercial area in Stockholm is privately owned and therefore they might set the parking fees at a limit they want. However the majority of the people that are shopping in Stockholm are using the public transportation.

4.4. Interview with Electrolux - Stockholm

During our trip to Stockholm we also met some retailers. One of the retailers we choose to interview was the Electrolux store, which was located on of the busiest central streets in Stockholm. The reason why we wanted to interview this store is primarily because they sold high volume merchandise like fridge's, vacuum cleaner etc. Secondly, we wanted to make a comparison between the two cities. We also wanted to hear a salesperson opinion so we choose to interview Göran Osvald. He told us that Electrolux had in total 60 stores (whereas 2 are owned by the company and the other 58 are owned by franchise) in Sweden. He further on explained that during the last five years the store (since the store opened) they have had big problems when it comes to finding good street parking places for customers. If you take look on the picture down-under and on the red star, you can see that the store is located on a street which is the hearth of Stockholm. Since the store sells mostly high volume merchandise Göran told us that they were in a big need of having good parking places at a good range from the store.

Figure 4.2: Map of Stockholm *(Source: Microsoft Virtual Earth).*

Further on in our conversation Göran explained to us that they have a parking garage close to the store, however the parking is so expensive that the customers do not want to use it. According to him, the reason for all the high parking fees is due to the fact that most of the parking garages are not owned by the municipality, instead they are owned by private persons which set their fees at their own whishes. When we asked him how they did with customers that wished to merchandise by itself, directly from the store? He told us that they usually choose to park the car in an illegal manner outside the shop. But at the same time he says that is understandable, because no one wants to park the car for 30 SEK at the garage next to the shop.

When we asked him if the congestion charging have had a negative impact on the sales, the explained to us that the fees have increased the problem. He said that:" *If you live in a city you have to be able to use your car*". To meet this problem the store started to offer their customers home delivery, whereas a central warehouse delivers the purchased merchandise directly to the customer's home by two delivery persons. For this delivery service they charge the customers with 1000 SEK, and the customers should live within the Stockholm area. With the picture under, we want to increase the readers understanding in how Electrolux worked with their distribution. When it comes to the staffs parking possibilities, the salesperson explained that they only have one parking space for which all the employees have to share, but no one use it.

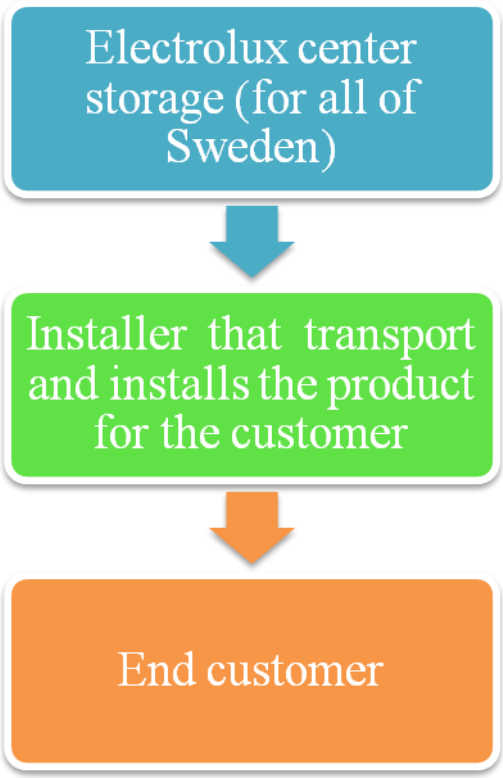

Figure 4.3: How Electrolux distribute their merchandise *(Authors own model).*

4.5. Interview with Magnus Jäderberg - Gothenburg

In Gothenburg we got the opportunity to meet Magnus Jäderberg, which works as a project manager for the traffic and public transport authority. The reason why we interviewed him was because of the simple reason that we wanted to hear how they co-operated with the retailers in Gothenburg also to make and comparison with Stockholm. He told us that his assignment is to work with concrete logistics and distribution solutions in Gothenburg, especially in the central parts of the city. One of his main missions is to increase the accessibility for transport suppliers which supply the retailers in Gothenburg. His focus is only to work with the private sector, and improve their situation.

Magnus explained to us that in their work with the private sector, they tried to make a mix between regulations and voluntary actions, in other words a balance between sticks (control systems, enforcements) and carrots. Further on in our interview he told us about a European Union project called Civitas Initiative, which they had worked with for the last three years. The

aim with this project was simply to try and involve the private sector in the changing progress. According to Magnus it is not possible to make any important changes if not you not include the private sector. He explained that in the private sector they included:

- Transport suppliers
- Shop owners
- Real-estate owners
- Associations that represent the retailers

He also told us how they managed to improve the accessibility in city, mainly by:

1. Restricting the vehicles accessibility at streets which were mainly used for walking by pedestrians.
2. Implement more efficient regulations like:
    - Authorized traffic
    - Time windows
3. Limited the legal framework
4. Let loading places be only used by some specially authorized vehicles.
5. Advance the relationship and cooperation between the transport suppliers and retailers.

By accomplishing all these above mentioned missions, they can achieve:

- Better flow in the traffic, in other words less congestion in the city.
- Less impact on the environment due to the restriction of cars.
- Decrease the stress-impact on the transport suppliers.

If we take a little closer look on each mission, Magnus told us that in Gothenburg city there are two kinds of streets whereas:

1. At some of them all kinds of vehicles are allowed to drive on, however they have to drive in a paste which does not exceed the paste of the pedestrians. On these streets the vehicles are not allowed to park and they have to give away for the pedestrians. The first picture below, show how these streets looked before removing the parking places.

Figure 4.4: Before and after the infrastructural changes

(Source: Magnus Jäderberg, Civitas report for 2008).

2. At the other streets only authorized vehicles are allowed to drive on, however they have a time limit which they have to follow. These vehicles purpose is to:
    - Transport people which live on these streets.
    - Transport guests to the hotels.
    - Transport goods to the different retailers.
    - Transport of patients.

The picture on the next side tries to show how these streets look like in the reality. The second street is most common in Europe, and it is an efficient regulation according to Magnus. On our question: What the retailers thought about these new regulations? Magnus answered that they were very satisfied because the stores open at 10 am. At that time there are not many customers or pedestrians walking on the streets so they use that time to distribute their products to approximately 11 am. This solution was also supported from the real-estate owners, and the city has in plan to re-design all the streets after the new "concepts" of pedestrian streets.

Magnus then further on explained that they have in plan to take away all the one way streets because they where inefficient when it comes to distributing products to the different retailers. He told us that if you take way the one way roads you will not only allow the transport services to deliver their goods in a much faster time, but also decrease their distance for traveling.

All these changes Magnus explained are regulated and controlled by:

- Gothenburg's traffic and public transport authority.

- The police force – focuses on regulating the traffic and stops all unauthorized vehicles.
  - Cycling police
  - Foot patrol police
- Parking security – try to remove all the cars that are parked at streets where car parking is not allowed.

Magnus told us that during their meetings with the private sector, they simply tried to show and explain how all of them would benefit from the morning distribution. After implementing all these infrastructural changes and regulations, they found out that the unauthorized traffic had decreased with 55 % in the city center, just in one year. However Magnus said that their goal is to reach 90 %.

When we also asked him if the city can supply al the customers with good and free parking spaces Magnus explained that it was not a problem. When he spoke with the real-estate owners he had only received good feedback. According to the real-estate owners there are free parking places in the city, like for instance at Nordstans garage. Magnus told us that the retailers sign a contract with the real-estate owners whereas the more the retailers sell, the more profit does the real-estate owners receive. In other words, the real-estate owners turnover is based on how much the retailers sell, and so far he haven't heard any complaints from the retailers concerning that the less parking places have had an negative impact on their sales. According to Magnus, when you take away the parking places from the streets you will actually have more customers walking on these streets, because of the improved environment. In other words, without the cars, the streets become much more attractive for customers to use.

Figure 4.5: Shows how the second street concept looks like in the reality *(Source: Magnus Jäderberg, Civitas report for 2008).*

He further on explained that today the customer's behavior has changed and those they actually do not want to drive all the way to the shop like in the past.

Instead they want to park the car at a nearby garage and then walk through the shopping districts. The connection between shopping and having lunch on the streets has changed the customer's behavior on driving at these streets. More and more people start to use the public transportation instead of using the car.

Before we ended our interview with Magnus, he explained to us that in Stockholm they do not work in the same way with this kind of issues like they do in Gothenburg. Instead of working in a close relationship with the private sector, in Stockholm the simply try face the problems by focusing on only changing the infrastructure. Magnus also told us that in Stockholm they do not have any employees that work 100 % with effective distribution, like in Gothenburg. According to him, in Stockholm they lack the knowledge of dealing with distribution issues.

4.6. Interview with Bruce Emms - Gothenburg

In Gothenburg we interviewed Bruce Emms which is store manager for a store that sells instruments in the city center. When we asked him what his opinion was for the parking situation in Gothenburg and what kind of impact it has had on his business, Bruce told us that it is very difficult and it has always been difficult to find some good parking places in Gothenburg, especially for his customers, because his store sells high volume merchandise (drums, guitars, speaker etc). He explained that he is in a much bigger need of good parking places compared to other retailers. To deal with this situation he offers his customers free transportation of their purchased instruments to the customers. Why he does it for free is of the simple reason that he looks at the distribution as just another service. Bruce told us that they have a warehouse located in the inner parts of the city, where they also distribute their products directly to their customers.

When we asked him what he thought about the infrastructural changes in Gothenburg, according to him and his experience is that customers like to come and visit his store but they find it hard to drive and navigate them. They have one parking space for which everyone in the store can use, but all of his employees are using the public transportation, so the parking space is mostly used by customers which need to load their car with purchased products.

Another way to deal with this issue concerning the parking problem is to allow their Customers to purchase their merchandise through an internet page. Bruce explained that they have their own

internet webpage, just so that the customer might have another option if they want to buy a product.

Before ending the interview with Bruce, he expressed to us that he sincerely would like to see an increase of the parking spaces in Gothenburg. But by building these new parking garages under the ground so it does not affect the beauty of the city.

4.7. Interview with Göran Claesson - Gothenburg

In Gothenburg we have been able to interview Göran Claesson, who is a storeowner for Möbel Studion, furniture store located in the city center (inside the moat). He explained to us that they have in plan to change their store location due to the inconvenience of selling furniture's in the city center. According to him the people that pass outside their store are mostly business people that come and go to work every day. In other words there are no potential customers passing at their current location. However he also told us that when they opened the store in 2000 they had a lot of customers but now with the financial crisis less people tend to purchase their products. Even if they have a nice and close parking location just outside their store, it does not really attract more customers to their store and one of the reasons is due to the many different employees that occupy the parking lots during the early hours, Göran explained.

To deal with the problem they offer their customers home delivery, either directly from the store or their warehouse which is located at Sisjön. They also offer their customers the option to collect their purchased product directly from their store if the customer wants to transport it home by himself. For home delivery service Göran told us that they charge the customers with between 495 SEK to 595 SEK depending on place (outside or inside in Gothenburg).

In addition Göran explained that another way for them to deal with the problem was to turn their store in to a showroom.

5. Analysis

In this section we intend to illustrate the answer of research question and sub-question by comparing collected data from different retailers, store manager and sales person in Gothenburg and Stockholm. Furthermore we explain the purpose of distribution system and direct delivery distribution whereas we after that aim to explain the new alternative solution of home delivery that has already been launched in different European countries.

5.1. Efficient Use of Available Car Parking Place

There are some ways to use available car parking place efficiently in the city center whereas shortage space of car parking place is seen as one of the main problems to continue the retail business. To illustrate, employees (of any kind if business) should not occupy the car parking places all day long, instead these parking spaces should be in used by the customers. If possible the employees can use the public transport (e.g. bus, tram). On the contrary, if it is necessary to use their private car at the time of working then they can park the car some other places instead of occupying the car parking places around the store. As a result the general customer will get a free parking which can be useful for the customer when he or she wants to do some shopping. Besides, people may come to city center by public transport and it is applicable for all classes of people (e.g. visitor, employer, employee, business man, customer etc.). Moreover, every user of car parking should be ethical concerned to let others use the parking place according to their consequence, it means no one should block a car parking space unnecessary; so that everyone can get access to use car parking conveniently.

5.2. Advantages of Recommendations

The main advantage of our recommendation is to invent possible solutions for the shortage space of car parking problem in the city center. Similarly, new business strategies could be found that might overcome this issue and provide better customer service. As a result, no customer might hesitate to come to the city center when they want to purchase either high and low volume merchandise due to the no free parking places. It can be expected that these recommendations would bring good conception for the retail businesses to implement and continue new events to survive in the competitive market.

One of the assertions of this, it is quite difficult to build the new car parking place at this moment in the inner city in order to minimize the car parking problem. So some recommendations are introduced here during continuing work with this project for last couple of months.

In the past, many companies set up transshipment center or local warehouse beside the market, well known as traditional logistics strategy. This system was followed to response to the market and it focused mainly on products sales. After that, some disadvantages were discovered, where one of them was its high delivery costs which increases logistics costs. After this notice, effective solution was found mainly by changing the delivery strategy, which turned out to be the direct distribution system. The system consolidates shipping to the local center or direct shipping to the end customer. It is obvious that the delivery strategy contributes to minimize the delivery cost and lead time to the customer. Current situation shows that the direct distribution system not only helps to reduce the delivery cost and lead time to the customer but also, it can be the fundamental answer to the issue of minimizing the current problem (shortage space of car parking). To illustrate, home delivery is the advanced solution of direct distribution system whereas people do not need to visit the retail store located at city center for buying merchandise by driving a private car. Home delivery and direct distribution systems provide product shipping facility towards customer locations in time. As a result people can come to the city center by public transportation to look at a product and after they have paid the necessary amount for both the price of the product and the home delivery, the product will be shipped directly from the store (or warehouse) to the customers address. However people do not need to visit city center often, because all necessary information is found on the company's web page and there is facility to pay the amount by internet. Since these facilities are available for people, the customers can utilize these facilities perfectly by saving time instead of coming to the city with their cars, because they do not need to worry about carrying heavy things any more. But if they wish to visit then they are always welcome to visit city center and enjoy shopping.

In addition, another recommendation to deal with the car parking issue in Gothenburg, as a retailer you can adapt your offers to the customers. It is called seasonal selling; for instance, some retail business can identify from their own business perspective, which product is sold excellently in changing season around the year. Then they can invest enough capital and time

behind of selling product around the season. However, they need to turn back again in their original track to sustain their business just so they can satisfy the customers demand during the season. For example, Chilli is a well known furniture shop for its exceptional furniture, recognized by the public for having a good quality in Sweden. During our interview with Chilli's store manager in Gothenburg we found some good information which could be useful for our study. The last winter season Chilli focused on selling blanket instead of selling furniture and they earned huge amount of profit because of their new business strategy. We also found that they always focus on their customers' demands and therefore they are ready to turn their concentration towards this area. To sum up, the intention of our recommendations is to find out possible solution of the current problem of reduction of parking in the city; so that no business is likely to disappear from the inner city.

5.3. Distribution Channels for the Retailers

Some different distribution channels may be available for retrial businesses; they are direct distribution system, home delivery service and recently invented alternative solution of home delivery service.

Direct distribution is the system of shipping product from store warehouse or showrooms towards customer locations. In general retailers send merchandise directly from central warehouse or store to the customer address; whenever customers wish to have this service due to the volume of product. To do this retail business can take charge from customer or it can be free of charge depends on the wish and business strategies of retailers. Besides home delivery service is dedicated for collecting service and delivering product according to the order of clients. It is applicable for both high or low volume merchandise as well as parcel too. After that, new invention is really appreciable concerning the thesis title. It is alternative solution of home delivery service called locker box service already thought to be dynamic issue for retail business because of innovative approaches of city logistics. This locker box service has been already launched in some other European countries. Its characteristics, benefits, results, reality every constructive discussion is as follow:

5.3.1. Objective of Alternative Solutions for Home Delivery

Modern technology is improving day by day that contribute to provide better customer service and launch new business strategies in connection with the all kinds of retail businesses. That is why, E-commerce and home delivery service are increasing gradually in every year in the world; whereas the two systems are closely connected of one another. It is thought that the physical distribution of goods to the consumer is a critical factor in the success of alternative solutions of home delivery.

5.3.1.1. Probable Clarifications

- The innovative approach of retail business is used for organizing "last mile" process competently.
- It can be considered by comparing to traditional doorstep deliveries alternative delivery locations; for instance, pick up points like locker boxes, time windows and alternative redeliveries strategies.
- The solution should be supported by an efficient transport planning and fleet monitoring system that can make sure the time windows service and achieve remarkable savings in urban vehicle km driven.
- The explanation may be appeared in different forms across businesses e.g. delivery of parcels by postal services and new approaches for e-commerce *(Source: Alternatives solution of home delivery).*

5.3.2. Personal Delivery Profile

The customer can indicate via internet when and where they wish to receive the goods following their personal preferences and availability. The tour planning system of the logistics service provider makes direct use of the information integrated in the delivery profiles of all customers *(Source: VMTL, Alternatives solution of home delivery).*

5.3.2.1. Key Benefits

- Improve the standard of life: The delivery time and location of users are possible to adjust perfectly to personal routine that can make less traffic-induced pollution in the inner-city. It is thought that the system may attract people to come to city center to enjoy shopping as long as they wish, whereas shortage space of car parking is not seen as great problem.

- Provide better transport service: It can ensure less congestion in the inner-city; overall transport service might be improved.

- Improve efficiency of delivery tours: The issue is closely connected with some improves efficiency; for instance, less stop, avoidable of unsuccessful delivery attempts, reduction of last mile costs, more independence for the operators in planning tours, lower energy consumption and so on. These all contribute to maintain the standard of living in the urban city.

- Offers more alternatives for private individuals: The system shows it service is available every day, every hour and choice of location.

5.3.3. How is it Impressive for Retail Business?

Alternative solution of home delivery comprises wide range of solutions from rather simple approaches to innovative system. Besides it makes easier complex system as well. There are some key conditions to implement this radical systems in the retail business are as follows:

- A stakeholder (e.g. private company, logistics company) with enormous interest needs to be given priority for its implementation. The company or group of companies is responsible for a critical mass of deliveries which allows an establishment already on an economic scale.

- An adequate number of users who are interested to use of new system.

- A detailed perception of retailers and users require and constraints to continue the process successfully.

The following picture shows how locker box system look like!

Figure 5.1: Scenario of Locker box - Alternative solution of home delivery

(Source: Alternatives solution of home delivery).

5.3.4. Benefits and Costs

Alternative solution for Home Delivery represents the following policy goals:

- From the perspective of transport the main benefit is to expect decrease of transport costs. To illustrate derive from the bundling of deliveries, the increase of the number of successful first-time deliveries, optimization of delivery tours and lower operational help to minimize the transport cost that might be the significant business strategies for retailers.

- In addition, other benefits are thought to make sure pollution free environment and less energy consumption. For example, the optimization of the transport leads to a reduction of unnecessary trips in the city center that can improve the smooth of standard of living for all citizens undoubtedly.

- Moreover, it is possible to give better customer service conditions from new systems which is one of the main objectives of the logistics.

5.3.4.1. Example

One practical example from Germany is shown as below:

The research study shows from PACKSTATION, DHL, Germany in 2006 in Cologne (1 million inhabitants, 29 stations) revealed that in that city alone 35,000 trip-km are saved annually as a result of the PACKSTATION scheme. These result from less delivery traffic and stops as well as from the reduced necessity of private car trips to collect shipments from postal outlets or depots, rather from the locker box as part of the client's daily routine *(Source: Alternatives solution of home delivery).*

From above mentioned example, it is apparent that the solution could be implemented in the retail businesses (for both high and small volume merchandises) in Gothenburg to provide better customer services than ever before.

5.3.4.2. Result of Scenario Calculations

Looking at the VMTL project scenario calculations, some positive effects are available related to the home delivery. The foundations for the scenarios are the real customer and tour data from Hermes Logistics group.

Scenario 1 - This scenario has been collected from Munich (one of the German cities) fuel stations. Transport planning including alternative delivery locations; whereas fuel stations in Munich are used as alternative locations. Therefore the results come up with reduction in km driven of up to 12% compared to a doorstep delivery, saving in delivery time of up to 5%.

Scenario 2 – This scenario has been collected from customer and depot or transport structures of Berlin (German capital). Transport planning including the introduction of a personal delivery profile; whereas customer and depot or transport structures from the city of Berlin are used. Very good results are seen like, significant improvement of the number of successful first time deliveries decreases the number if second or third or fourth time delivery attempts and the number of vehicles needed can be reduced by up to 4%.

It is perceptible that better customer service having slightly higher prices, besides optimization potential may lead to a general cost reduction *(Source: VMTL, Alternatives solution of home delivery).*

From above mentioned implemented results in some land it is revealed that retail businesses can follow these strategies when shipping product towards customer locations. In this way, they may be benefited by earning huge amount of profit by selling product as well as improving customer service.

5.3.4.3. Costs

The research study shows that no cost is found for the city administration but in some cases an income is possible from renting out public space for the installation of pick up points. However, different cost is seen for implementing of the hardware, supporting transport planning and fleet monitoring system. In addition, it is seen that increasing in customer satisfaction and savings of operational costs can overcome in the medium term the expenses for the installation of a locker box service. One thing is obviously important that the locations for pick up points should be well chosen to minimize additional passenger car trips *(Source: Alternatives solution of home delivery).*

5.3.5. Users and Retailers

From users perspective some important events are discussed below:

Not only the private customers but also companies who work in the field of maintenance and provide different services might be targeted by home delivery solutions. To illustrate, private customer purchase both high and low volume merchandises, whereas maintenance company is likely to buy always high volume merchandises. So, the alternative solution of home delivery service would bring great opportunity for retail businesses to continue their business and go ahead for having better market position.

One of the assertions is alternative delivery locations as well as delivery time windows can offer a significant opportunity of the service level of a parcel service. Besides the wishes of clients is possible to consider in a very flexible way is seen as a big advantage of the solutions for both the

operator and consumers. Furthermore, the supporting tour planning and monitoring solutions is an important tool for the dispatcher in organizing the delivery tours.

To sum up, it is absolutely important that a new home delivery service having the use of locker boxes represents supplementary alternative for the customer. The customer should be given free choice to take new service or not (any kind of obligation must be discouraged) and it is definite that if the consumers get benefited from this radical service then they will be continuing it.

Figure 5.2: Public space *(Source: PTV planning transport verkehr AG).*

From retailers perspective for implementation issues are discussed below:

The report of Alternatives solution of home delivery represents that the implementation of event is not connected with the city administrations but private companies. It also shows that the express and logistics service providers are the main driving force and they may push the implementation of concepts and the related transport planning and fleet monitoring system within their existing cooperation e.g. with one or several distance sellers. It is also seen that if the city administration initiates and promotes the set up and installation of pick up points e.g. within a public transport strategy then it would be good idea from overall aspects undoubtedly.

From above discussion it can be summarize that, if the retail businesses think they need to improve their home delivery service by minimizing unexpected problem in order to provide

better customer service then they may take above mentioned steps as pip lace project. After getting result they may think about it what should be done in future. It might be expected that the new solution would bring positive affect for retailers so that, customer could enjoy shopping at city center whenever shortage space of car parking is not big problem at all.

5.3.6. From Perception to Reality

Before implementing any mission a clear and user friendly layout of the solution is the key factor for success and the success would carry weight for good user acceptance. The same thing is applicable here; for example, deliveries of inbound items should be supported as well as the drop-off of outbound shipments, including returns, along with facilities for the associated payment. Furthermore, reliability of all elements is essential.

Figure 5.3: Example Hermes Packet shop in Germany *(Source: Hermes Logistik Gruppe, Alternatives solution of home delivery).*

The matching transport planning would be designed by retail businesses and the monitoring system ensures proof of delivery. Transport planning systems on the retailer's side can help to integrate both pick up points and other delivery locations in an overall transport planning and provide data, for instance, communication with customers.

5.3.6.1. Preparation

Figure 5.4: Flow chart of the preparation stage *(Source: Alternatives solution of home delivery).*

5.3.6.1.1. Key Aspects of This Stage

- Identification of customers needs by surveying (e.g. is it really convenient for customers?).
- Reorganization of retailers' requirements (e.g. how the solution can contribute to retail businesses, so that, both customers and retailers would be benefited simultaneously).
- Design of services and business models for both retail businesses and effective solutions.
- Information about available pick up points (e.g. locker boxes) to be used.
- Good information about the locations where pick up points may be installed.
- Cooperation between city and retail businesses or service provider companies with regard to locations for pick up points.
- Consideration of security issues that may prevent the installation of locker boxes at certain locations.
- Decision about technical layout; for instance, pick up points, transport planning system, customer demand and so on.
- Design of IT system (e.g. EDI system) for client and retailers' registration, information and authorization. Therefore regular customer can get advantages when buying product next time.
- Identification of test area (how consumers response regarding locations).
- Contracts for use of locations.

It is important to mention that alternative solutions for home delivery could be embedded in and supported by an adequate planning and organizational structure either the express and logistics service provider or well organized retail business.

N.B. "if possible then the alternative service should be free of charge as customers often as customers often do not accept extra costs for extra service."

5.3.6.2. Implementation

Figure 5.5: Flow chart of the implementation stage (*Source: Alternatives solution of home delivery).*

5.3.6.2.1. Key Aspects of This Stage

- Promote the new service already during implementation phase from perspective of retail business.
- Sufficient internal system tests.
- Limited tests with customers that can easily adapt to new services, e.g. students (installation at universities).
- Installation of necessary infrastructure; for example, locker boxes need to be installed.

How consignee becomes adapted easily by using their daily necessary electronic equipment, the figure is shown below:

Figure 5.6: Consignee receives message

(Source: VMTL, Alternatives solution of home delivery).

5.3.6.3. Operation

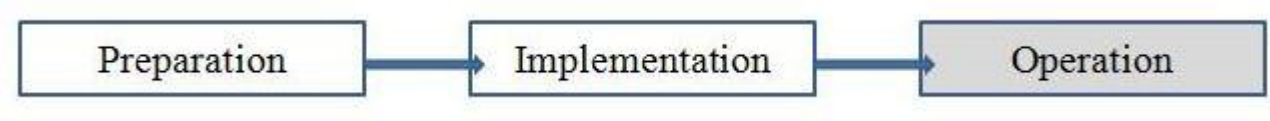

Figure 5.7: Flow chart of the operation stage (Source: *Alternatives solution of home delivery).*

5.3.6.3.1 Key Aspects of This Stage

- Marketing campaign with special conditions for users (it may be conducted by advertising new alternative solution on the mass media, e.g. television, radio, newspaper, magazines or SDR Svensk Direktreklam).
- Well organized customer service center at each retail business those who wish to introduce the new dynamic system in their business.
- Ongoing customer surveys for direct consideration of customer needs; it must help to improve the overall service and make much more attractive to the new users.

How consignee can collect parcel from locker box, figure is shown as below:

Figure 5.8: Consignee collects parcel from locker box *(Source: DHL Express Germany).*

5.3.6.4. Process Related to the Use of Locker Boxes

- Consumer needs to register once to become a user of the locker box service. As a result they receive access details, e.g. PIN code and/or card. (The issue of registering cost depending on the wish of retailers or the service provider company.)
- Ordering of an item by customer; for example, from a distance selling retail company. The locker box is given as shipping address.
- The retail business or logistics service provider delivery the parcel to the locker box. After delivering the products, the consignee is informed by e-mail, mobile text SMS.
- Consumers can pick up their delivered parcel from locker box in their free time own schedule.
- The consignee is able to login with PIN and smart card to receive parcel.
- Finally, it is now time to collect parcel *(Source: Alternatives solution of home delivery).*

5.3.7. Special Issues Related to the Locker Boxes

Some issues are important associated to locker boxes. For example, locations of pick up points should be in good position, where customer can pick up their orders. With regard to the locker boxes the following issues have to be considered.

5.3.7.1. Location Choice

Customer preferred area and easy to access should be given priority before choosing the location. To illustrate, the location choice is based on the consideration of "Where are the most frequented points by the users?"

Research study shows that most frequently used location is central railway stations, where people can across the way by driving car without having any traffic jam or collision. But retail business need to think about it to choose the best location for customers' satisfaction, because the aim is to choose locations with the best likelihood of good user investment.

5.3.7.2. User Group

In general, the user groups of locker boxes might be service person or not. If the large group of users of locker boxes are employees they can pick up on the way of returning home. Similarly non service person can pick up according to their wish, because of free access 24 hours. The choice of the equipment but also of the servicing concept and the location of the equipment depends heavily on the addressed group. So, it is important to think about before choosing location and setting up the location in order to both employed and none employed people become benefited simultaneously. From retailers' point of view, everything should be decided from their business perspective to provide better customer service.

5.3.7.3. Kinds of Goods

Different kinds and number of goods could be stored in the locker boxes. But the service center decides about layout and features of the boxes. Several types of goods are possible to be stored at boxes such as:

- Parcel and packages
- Spare parts
- Dispatches and returns
- Electronic payment and so on.

In addition, retailers can change the location of the locker boxes according to their wish in order to deliver product in time and let customer pick up delivered goods easily. Also the layout and features might be changed depending on the volume (high or low) of merchandise.

It should be noted that, when too high volume merchandise is not possible to be delivered inside the locker box then direct distribution system or home delivery service would be the perfect way of delivering product.

5.3.7.4. Technical Requirements

Some important facilities must be seen always for the establishment of a locker box, they are:

- Electric power
- Telephone access
- Free access for clients(24 hours)
- Enough information how to use locker box *(Source: Alternatives solution of home delivery).*

It is clear from following picture when people like to pick their product from locker box. Most people like to collect parcel on the way from work. Then people interested to get their parcel during lunch break and way to work. Several people can collect their product others time.

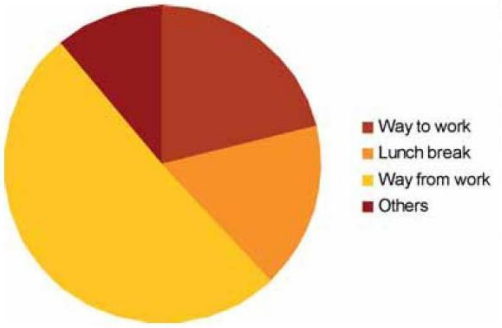

Figure 5.9: Time of collection at pick up points and locker banks *(Source: DHL Express Germany).*

5.4. Effects on Customers and Businesses

In general, family customer, young generation, elderly people would be affected positively. To illustrate, family customer like to visit showrooms with their family and kids by driving car. So they need to park car when coming to the city center. After implementing the possible solution on the retail business family customer will get more interest to come to the city center for buying product in different stores. Similarly, when young generation will come to the inner city to visit and buy high volume electronic equipment then they will not face any problem in connection with shortage space of car parking place. Besides, elderly people are seen to use private car when coming to the city center shops. Direct distribution system, home delivery service or alternative

solution of home delivery could help them to buy and enjoy shopping as long as they wish at city center, whenever unavailable car parking place would not be seen as great problem.

The overall affects on business is thought to be good, because when customer will be more interested to return to the city center for shopping like they used to do before. Moreover new customer would be fascinated to visit and enjoy shopping as long as they wish. However, logistics service Provider Company may get benefited if retailers wish to use them for shipping product efficiently towards customer's location in order to maintain customer satisfaction smoothly. To sum up, there is a high possibility to observe positive effects on both customers and business.

5.5. Interruption

It is obvious that some interruption may appear during implementing and using the possible solutions on the field. It may be cost, realization time effect and so on. Cost is a significant issue before starting any project, in that sense retailers may need to invest capital when establishing alternative solution of home delivery locker box system. It can be predictable that all retail businesses really would be interested to spend money behind of setting up locker box system or not!

Many clients will not be able to understand the necessity]y and reality of alternative solution of home delivery at the first moment. So it might be bit stressful to make them understand in the preliminary stage of the project. But, hopefully after that they will take the advantages by taking facility of direct distribution system, home delivery system and alternative solution of home delivery according to their wish.

5.6. Preparation of Retailers and Customers for Changes

From our point of view, the first initiative should be taken by retailers. If so, then customer would be influenced automatically. Since the retailers are facing the problem by losing customer from city center gradually due to the shortage place of car parking, then the alternative solution of mentioned problem is required to be introduced by retailers first. To do this all employees of retail stores need to have good concern about the system; e.g. the purpose, application, advantage

and related all kinds of issue. So, the store staff can make consumer understand easily to promote the facility. Besides, retail business can take help from any consulting firm or logistics company. After being successful they ought to take initiative to make customer understand the advantage and necessity of the service. Besides they have to show how they improve customer service. Then the customer must take these kinds of helps to be stress free from every side.

6. Statistics

This section shows overall statistical view of research work. It consists of pie chart with the impact of car parking problem on the retail businesses, availability of internet users to solve the problem and the comparable solution of home delivery.

Of all our interviewed retailers, only one did not complain when it came to if they had any problems with the reduction of parking. As you can see on the diagram under, 66% of the retailers expressed that they felt that the car parking situation had a negative impact on their businesses. 17% felt a positive impact due to the reason that they had parking places just outside their stores. Finally, 17% expressed that they were not sure what kind of impact it had on their businesses.

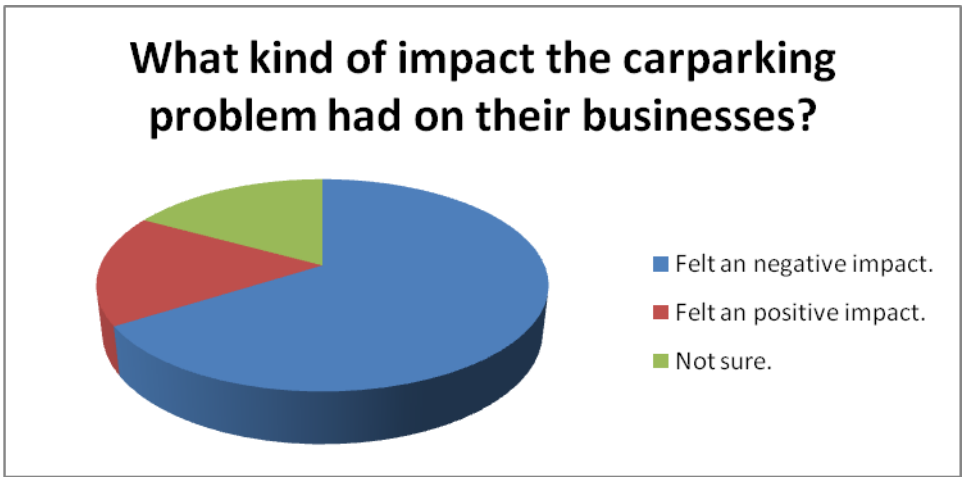

Figure 6.1: Pie chart of impact of car parking problem on the retail business (*Authors own model*).

To deal with this issue, we asked how many of the retailers sold their products through internet. 33% of the retailers expressed that they did not use the internet as a second option for the customers to purchase their products. On the other side 66% of the retailers found the internet to be a good solution to deal with the car parking problem, and therefore offered this solution to their customers.

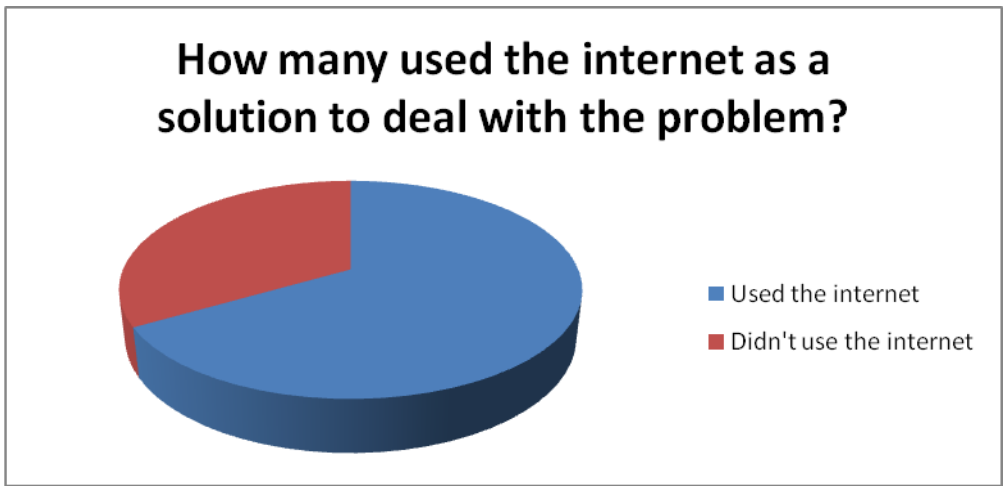

Figure 6.2: Pie chart of internet users (*Authors own model*).

On our question how many offered their customers home delivery as a solution to the problem, all of our retailers used this distribution solution. If we go back to Levy and Weitz service theory, this means that most of the retailers use a customized service approach whereas they ask the customers how they want their product to be transported.

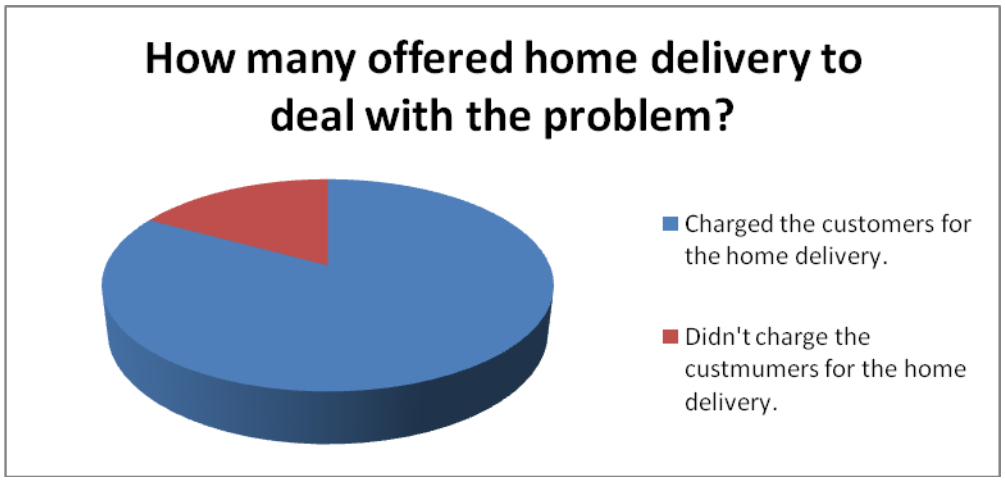

Figure 6.3: Pie Chart of solution of home delivery (*Authors own model*).

7. Conclusions and Recommendations

This section consists of two elements of the thesis; Conclusion and Recommendation. Conclusion shows the results of our overall study, and the study illustrated the good combination between retail business and organized distribution system that can facilitate the improvement of customer service. Besides, Recommendations demonstrate the possible solutions of the thesis title that is current phenomenon for most businesses in Gothenburg city center. Moreover, it is our great opportunity to highlight some business strategies within recommendations, how retailers can think about it! This research has emphasized to make good collaboration between consumer and retail business in order to be benefited by one another from own side. Syntheses endeavor at recommending the organized conclusion would bring good result for retail business in Gothenburg is our anticipation.

7.1. Conclusion

From our research study on *"Possible solutions of car parking problem of retail business in Gothenburg city center"*; we can conclude that always people do not need to use car parking when coming to city center for shopping or business purpose. They are appreciated to use public transport to visit store or on the way of work. Similarly, people may park car somewhere else to buy products or when working or doing business in the city center. Also, to buy both high and low volume merchandise consumer do not need to use their private car; whereas retailers are ready to ship products towards customer locations in time, which is one of the important elements of customer satisfaction.

It is important to mention that Gothenburg city needs to solve the problem of fixing the price and time limitations for every parking place, otherwise the issue of car parking problem can never be resolved. Better co-operation should be available among Trafikkontoret, Parkeringsbolaget and the other smaller privet owned parking owners. To illustrate, Parkeringsbolaget which is the owner of the parking place at Heden in Gothenburg city could never solve the problem with employees occupying the parking space when the parking fees at Heden is much lower than the other parking places which are owned by Trafikkontoret. Gothenburg must realize that they have a problem when it comes to finding available parking place for customers and tourists, in other

words we can only confirm Levy and Weitz theory that free parking places are a problem for customers and retailers which are located at central business districts.

Concerning the so called green cars (environmental friendly cars) and their advantages in the inner city are really appreciable to lessen the car parking problem. For example, the green car system facilitates to park car for two hours at place instead of 10 minutes in other place.

Most retailers in Gothenburg city center informed us during our research work that they often face difficulty for the shortage space of car parking space. However, Magnus Jäderberg (project manager of the Traffic and Public Transport Authority in Gothenburg) let us know that he did not get any complain from private sector e.g. real-state owners, retailers organization. Instead he knew positive feedbacks to the new street reforms and distributions solutions that have been recently implemented in Gothenburg city center.

We assume that Gothenburg needs to continue to improve the public transportation system, which is mentioned on WSP research report. This improvement is necessary, because of providing not only faster bus-lines or tram-lines but also to ensure more convenient and clean automobiles that can satisfy the expectation of traveler. In other words, the city should work with implementing infrastructural changes parallel with working to improve the alternative transportation solution.

From retailers point of view, the new car parking place should be built under the ground or building. In this way the city would not be too obstruct and it will not destroy nice environment of Gothenburg. We can agree with retailers thought and fully support the new parking policy in Gothenburg.

When it comes to the interviews which were conducted in Gothenburg and Stockholm, we can say that we are very satisfied with their knowledge and response. Most of the store managers have enough experience with this problem and could therefore give us a lot of information with suggestion of potential solutions. It was also interesting to talk with the different authorities and organizations (which in one way or another where involved with the car-parking problem) because then we could get their opinion and perspective on the issues. Our interview experience with different retail businesses and authorities shows that most retailers have same opinion on

the issue; however the authorities divided opinions how to deal with the problem. So by using the Grounded Theory we managed to collect opinions of all our stakeholders and by doing so also increase our understanding for the problem.

7.2. Recommendations

(i) Employees of retail stores should be forbidden to use car parking during their working time at store. Therefore consumer can get enough free space to park car when visiting and buying goods at shops.

(ii) Direct distribution system should be monitored and improved in regular basis. Therefore, any kind of mistake is possible to remove instantly for avoiding complaints from clients.

(iii) If possible to maintain strictly customer channel requirements from distribution perspective then that would be fine undoubtedly.

(iv) Locker box service (alternative solution of home delivery service) needs to be established area wise and the location should be fixed by retail businesses who think this new solution might satisfy customer by saving time, money and considering all aspects of minimizing reduction of car parking problem.

(v) Retail businesses can take help from logistics service provider to ship product towards customer location whenever they are unable to provide specific facility to customer.

(vi) If possible the alternative service should be free of charge as customers often do not accept extra costs for extra service. Otherwise, the charge must be minimized as much as possible so that, none feel extra pressure to pay the charge.

(vii) Locker box service (alternative solution of home delivery service) needs to be established area wise and the location should be fixed by retail businesses who think this new solution might satisfy customer by saving time, money and considering all aspects of minimizing reduction of car parking problem.

(viii) New ideas may be found from customer perception. So retailers can take new inspiration by surveying customer to keep up their business goodwill.

(ix) The retailers can also move the warehouse outside the city-center. Hence, it is easy process to distribute the products to the customers and just set up so called "Showroom Store" in downtown where the customers can leave their orders.

(x) Retail business can establish both store and warehouse together inside the city. Therefore, retailers can just deliver the product to the customer's car which is parked at the different parking place around the city-center. As a result, customers do not have to enter the central parts of the city with their cars just to be picked up their products.

The research cannot be finished yet, it should be continuing process. From our point of view, it is quiet important to think about further research in this area which would be absolutely interesting for researchers.

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8.5. Interviews Sources

Interview with Erik Eriksson – Store manager at Chilli in Gothenburg.

Interview with Björn Hugosson – Project manager for Stockholm's environment and health Administration.

Interview with Daniel Firth - Traffic planner in the traffic administration of Stockholm.

Interview with Göran Osvald – Salesperson at Electrolux in Stockholm.

Interview with Magnus Jäderberg - Project manager for the traffic and public transport authority in Gothenburg.

Interview with Bruce Emms – Storeowner of MUG in Gothenburg.

Interview with Göran Claesson – Storeowner of Möbel Studion in Gothenburg.

8.6. Figure Sources

Figure 1.1: The area we focus for this research *(Source: www.eurotourism.com).*

Figure 1.2: Thesis outline *(Authors own model).*

Figure 2.1: How many car users there are (amount of cars per every 1000 inhabitants) in the different city district (blue bars), compared to the city-center (red bar) in 2008 *(Source: WSP research report 2008; p. 28.)*

Figure 2.2: Comparison between the industrial/commercial life and social structure *(Source: WSP research p. 30)*

Figure 2.3: The four parking-zones in the city of Pecs, Hungary *(Authors own model).*

Figure 2.4: Information sign *(Source: www.trendsetters.com).*

Figure 2.5: Concept of grounded theory *(Authors own model).*

Figure 2.6: Evaluation of retailers services by Customer *(Source: Levy and Weitz 2001, p. 592).*

Figure 2.7: Reilly's Law
(Source:http://people.hofstra.edu/geotrans/eng/ch7en/meth7en/reillylaw.html)

Figure 2.8: Huffs model
(Source:http://people.hofstra.edu/geotrans/eng/ch7en/meth7en/hufflaw.htm)

Figure 2.9: The retailer's position in the supply chain *(Authors own model).*

9. Appendix – 1

Questionnaire

1. What is the name of the company?

   _____

2. How long have you been continuing your business in this place?
   - □ 0-9 years
   - □ 10-19 years
   - □ 20-29 years
   - □ more than 30 years
3. When do you get more customers?
   - □ Weekend (__morning/__lunch time/__afternoon)
   - □ Weekdays (__morning/__lunch time/__afternoon)
4. Are you facing any problem about reduction of car parking due to complain from customers?
   - □ Yes
   - □ No
5. Since when this problem is seen!
   - □ Last 20 to 15 years
   - □ Last 14 to 10 years
   - □ Last 9 to 5 years
   - □ Last 5 to 3 years
   - □ Less than 3 years
6. Does the problem affect on your business?
   - □ Yes (how?)_____
   - □ No

7. Are you losing the number of your customer due to the problem? If so then please specify the approximate figure
    - □ 0-15%
    - □ 16%-30%
    - □ 31%-45%
    - □ 45%-60%
    - □ over 60%
8. Is the problem increasing day by day?
    - □ Yes
    - □ No
9. How do you distribute your product if not directly from the shop?
    - □ Using internet
    - □ Direct distribution
    - □ Home delivery service
    - □ Some other solution(please state)_____
10. Do you have any idea to minimize the problem? If so, please state_____
    _____
    _____
11. If any car parking place is built close to your shop then which area can you recommend?
    - □ 1st preference_____
    - □ 2nd preference_____
    - □ 3rd preference_____
12. How many staff of the shop use private car?
    _____
13. Where do they park their car when working here?
    _____