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Importance of Green Service Offerings for French and  
Swedish Retailers in their Selection of Transport  
Operators

*A study of French and Swedish companies operating in the retail industry.*



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## **Abstract**

**Background:** The selection of transport operators has become a complex decision making process with multi-criteria aspects. Deciding on which transport operator to use depends on various service offerings that can be different for each company. Retailers such as those from France and Sweden look to improve logistical performance in areas such as lead time, flexibility and reliability, and improve customer relations. In the past the main critical aspects of retailers were cost and service optimisation. An additional factor could play a role in their selection of transport operators and this is green service offerings.

**Research question:** Which service offerings are important for French and Swedish retailers in their selection of transport operators?

- **Sub question:** Are the retailers willing to use green service offerings and why?
- **Sub question2:** Which of the green service offerings are important for French and Swedish retailers in their selection of transport operators?

**Purpose:** The purpose of this paper is to find out what the most important service offerings are for French and Swedish retailers in their selection of transport operators. It also aims to determine if French and Swedish retailers are willing to use green service offerings and explain why. Finally, it will attempt to identify which of the green service offerings are important to French and Swedish retailers in their selection of transport operators.

**Method:** This thesis was conducted by applying the deductive approach and is based on a quantitative research method. The sampling method used for this thesis is non-probability sampling. Data was collected through questionnaires with French and Swedish retailers. French and Swedish retailers have been selected for the sample population in order to find out how important green service offerings might be for them when they are purchasing the services of a transport operator. French and Swedish retailers from different sectors were chosen in order to achieve an objective overview of the retail industry from each country when selecting transport operators.

**Conclusion:** Traditional service offerings are more important than green service offerings for the French and Swedish retailers that participated in this research paper. However, when looking at the results of the data, some green service offerings were perceived to be important. The author therefore believes that when French and Swedish retailers are selecting transport operators their first focus is on the traditional service offerings that are very important to them. However, if a French or Swedish retailer is encouraged by the following motivators: customer expectations, measurable improvement or economic incentives. They might pursue the green service offerings that are important for their business activities.

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# 1. Introduction

## 1.1. Background

The green movement is increasingly gaining momentum and attracting attention from organisations in many industries (Sarkis, 2013). This is due to the fact that customers are more aware than ever of the impact business activities are having on the environment (European Commission, 2014). Companies will continue to attempt to maximise profits for shareholders, but they must also consider how they are being perceived by their customers and act to ensure they are reducing their environmental impact. According to Sarkis (2013) it is no longer enough for companies to focus solely on greening their own internal activities, but instead they must look at the how the wider supply chain can improve.

According to Zhu & Sarkis, (2006) companies have become increasingly more concerned with having a greener supply chain (GSC) as long as they have to operate in line with new regulations defined by governments and recognised authorities such as the International Organization for Standardization (ISO, 2015). Green supply chain management (GSCM), as defined by Payman & Searcy (2013) is a concept that affects various dimensions such as management, production, purchasing and can be linked to the environmental aspect. A company operating with a GSC is supposed to lower its impact on the environment (lower the carbon footprint for example) and remain as competitive as possible within its market.

Since products are increasingly being transported over longer distances and in larger quantities the overall impact logistical activities are having on the environment is increasing (Åhman, 2005). Additionally, customers within a supply chain are becoming more environmentally aware and conscious of the way in which their buying habits are affecting the environment and are looking at ways to reduce their impact (Evangelista, 2014). Areas such as corporate social responsibility (CSR) are becoming increasingly important (Cruz & Matsypura, 2009). The increasing focus on environmental issues has a noteworthy impact on supply chains. According to Fabian (2000) a low environmental performance of an organization at any point in the supply chain, could potentially damage a firm's reputation. As a result of this companies are trying to expand their responsibilities in the supply chain by incorporating CSR (Cruz and Matsypura, 2009). Reder, 1994 defined CSR as follows;

*“An all-encompassing notion, corporate social responsibility refers to both the way a company conducts its internal operations, including the way it treats its workforce, and its impact on the world around it” (Reder, 1994, pg.5).*

Another important component of supply chains which could be used to improve green credentials is Logistics service providers (LSPs) and more specifically the services they offer. LSPs, offer a service to companies to support the supply chain in overseeing the movement of products from the beginning of a process to the end destination (Kilibarda, Zečević, & Vidović, 2012). Activities which LSPs offer can include the organisation of transport operators, shipping and handling, management of inventory, providing/sourcing of warehousing, packaging solutions and security services for each of these activities (Martinsen, 2014).

There are different categories of LSPs including a 1PL, 2PL, 3PL and 4PL. However in the rest of this chapter; the point of view of 2PL will be displayed. A 2PL can also be referred to as a transport operator. The main task of a transport operator is to handle the transport of goods from one location to another for their customers, this include transport methods such as planes, trains, boats, lorries and smaller transport vehicles (Johnson, 2008).

Transport operators are looking into ways of reducing the impact they have on the environment by adopting more green strategies (Erhardt, 2010). It was explained by Krishna, Krishna, Kuladeep, & Kumar (2012) that initiatives aimed at tackling environmental issues within supply chains have mainly been focussed on specific areas such as a manufacturer’s operations. This is due in part to the fact that most transport operators lack influence within a supply chain and can be dictated to by the larger players (Martinsen, 2014). The authors continue to explain that there is an absence of research on transport operators even though the role they play within supply chains is crucial.

The external environment is challenging transport operators to offer a more sustainable environmentally friendly service (Colicchia, Marchet, Melacini , & Perotti, 2013). This change in the external market presents transport operators with opportunities as well as obstacles to overcome (Potter & Lalwani, 2008). Industry stakeholders are encouraging transport operators to reduce the environmental impact their activities have on supply chains and improve their level of carbon emission transparency. The aim is to not only promote

greener operations, but to also take advantage of a reduction in logistical costs as well as to gain access to any available Government subsidies (i.e. tax reductions / green initiatives funding) (Minx, Scott, Peters, & Barret, 2008).

Research conducted by Maloni & Benton (2000) discovered it is possible to use the level of influence as a form of tool that can enhance overall performance within a supply chain. Martinsen (2014) explains that it is typically the customer who has the most influence over a supply chain. The author goes on to suggest that the actor with the most influence can encourage the rest of the supply chain to adopt a greener approach. Furthermore, the actor in the supply chain closest to the customer is usually a retailer.

## 1.2. Problem discussion

Global operations and the ever increasing demands of customers have made it necessary to think about how supply chains can evolve and adapt to a greener way of operating (Rainey, 2006). It has been reported by Ballot & Fontane (2010) that logistics with a focus on the transport aspect, is facilitating growth within the supply chain sector. There are however, a number of actors within a supply chain, each of which has varying degrees of influence on the overall decision making process within a supply chain. It has been reasoned that the level of power within a supply chain determines, to what degree, organisations will be willing to take environmental considerations into account (Martinsen, 2014). This leads to a situation where more influential actors could encourage weaker actors to alter their activities to fall in line with their green requirements. It has been suggested by Amaeshi, Osuji, & Nnodim (2008) that potential future green demand from consumers could mean that retailers for example will have to look at ways to improve their green credentials. Figure 1 below shows the level of influence within a generic linear supply chain with a focus on the retailer.

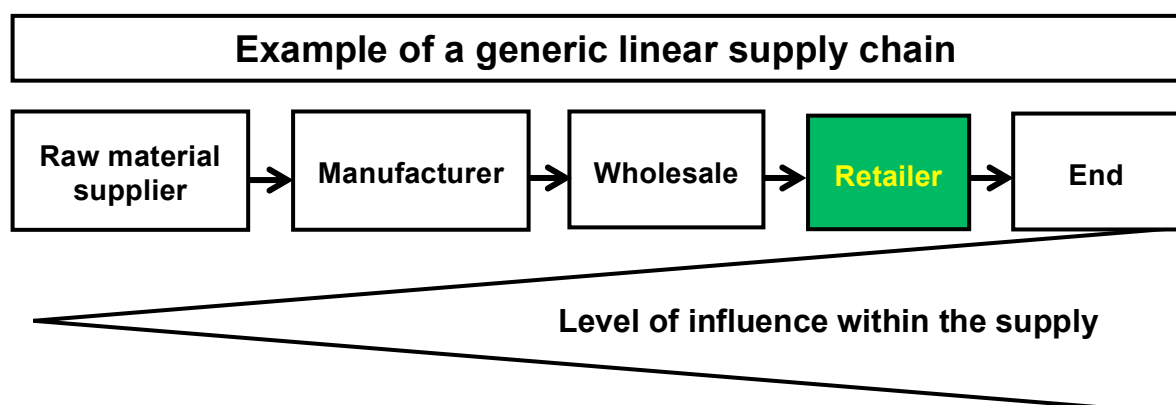


Figure 1: Authors own interpretation of level of influence within a generic linear supply chain

It has been suggested by McKinnon (2000) that within the last 10 years in Europe, the amount of goods being transported has increased at a greater rate than that of both gross domestic product (GDP) and industrial production.

The growth within the transport industry as described by McKinnon (2000), has led to an increase in environmental damage which customers are now more aware of than ever (Sharma & Jain, 2014). In order to combat this negative affect, agreements between nations to reduce the impact their business activities are having on the environment have been made, such agreements include the Kyoto climate targets (Allianz & WWF, 2009).

One example of such a country is France, which emits relatively low levels of emissions, particularly for an industrialised country. However, by viewing figure 2, it is possible to see that road and freight transport is responsible for the joint highest levels of emissions (Allianz & WWFb, 2009). France also scored badly when it came to transport as sector looking to improve, it was deemed being as unambitious and has yet to sign into law aiming for a general target of having transport related emissions reduced by 20% by 2020. That being said, France did ratify the Kyoto climate targets and has signed up to the EU2020 emission reductions targets (Allianz & WWFb, 2009).

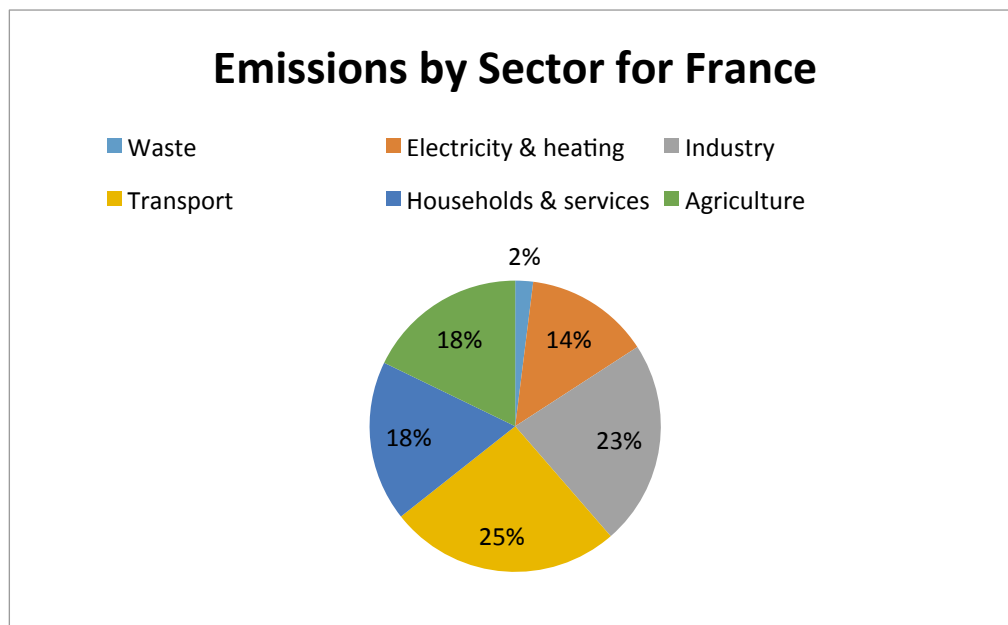


Figure 2: Author's own interpretation of data (Allianz & WWFb 2009)

Another example is Sweden, which has been acknowledged as a leading actor in overcoming the challenges presented by the impact business activities have had on the environment. An example of this could be Sweden’s efforts to reach the Kyoto climate targets. However, to date, Sweden has yet to fully reach its targets set during the climate change negotiations in 1992 (Allianz & WWF, 2009). It has been suggested that this is in part due to a lack of motivation from internal goal setting by policy makers (Minx et al., 2008). Figure 3 shows that road and freight transport is responsible for 32% of the total carbon footprint emissions in Sweden; this results in a high degree of pressure on the Swedish logistics service industry.

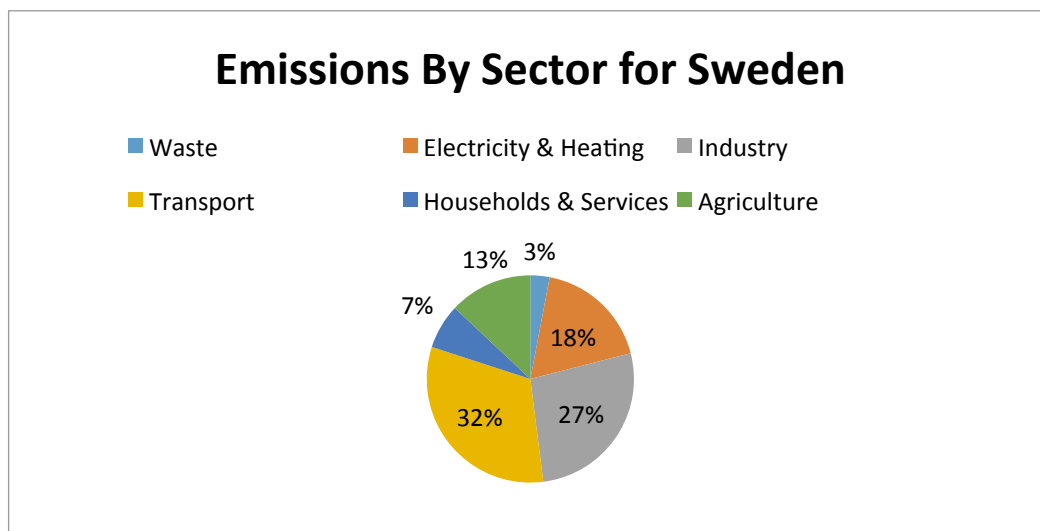


Figure 3: Author’s own interpretation of the data – (Allianz & WWF 2009)

A logistics service provider (LSP) offers services throughout the supply chain (Johnson, 2008). A typical LSP service could be to provide a transport operator to a retailer (Kilibarda et al., 2012). Since a retailer has a high degree of influence within a supply chain it can select its transport operator based on its own criteria (Martinsen, 2014). Additionally, the author noticed that there is a noticeable lack of research on green transport operator services for retailers. Figure 4 below shows a more detailed look at the supply chain from the perspective of a retailer. It is possible to see the relationship between the supply chain actors and where the services of a transport operator are present (Johnson, 2008).

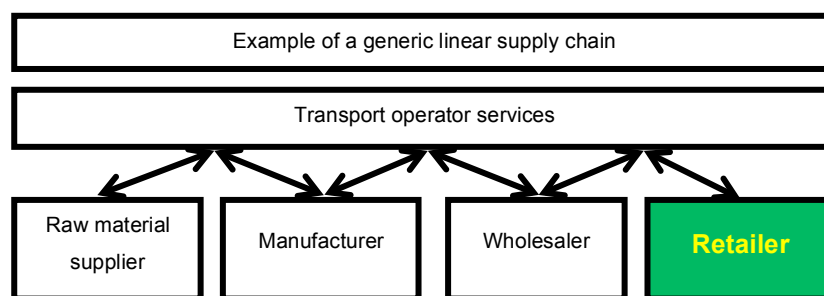


Figure 4 Author’s own interpretation of LSP service offering with an emphasis on the retailer

In order to be competitive, transport operators offer a range of services to their customers. These are typically traditional service offerings such as cost and quality of service (Yu, Elinger, & Haozhe, 2010 ). However, a recent trend has been to offer green related services to appeal to more environmentally conscious customers (McKinnon, 2010). An example of a green related service could be a form of environmental certification such as ISO 14001 (ISO, 2015). Isaksson & Hüge-Brodin (2010) identified internal as well as external barriers that exist for transport operators when trying to deal with green initiatives. The internal barriers include technical, financial, managerial, organisational and informational. The external barriers they highlighted are regulatory and market forces.

There are also drivers that affect transport operators when it comes to the implementation of a greener service. This may include for example, regulations from the government forcing the transport operators to adapt their activities in order to lower their impact on the environment (Walker, Lucio, & McBain, 2008). This influences the transport operations of a retailer as well, since they are customers of transport operators. Pressure from customers like retailers can also have the same effect on the transport operators since they have the power to make decisions and can easily look for a new transport operator if they are not satisfied (Fabbe-Costes, Jahre, & Roussat, 2008).

Therefore, the selection of transport operators for retailers has become a complex decision making process. Retailers have typically made their transport purchasing decisions based on cost and service optimisation (Chen & Wu, 2011). Retailers look to improve logistics performance like, lead times, flexibility and reliability, and improve customer relations. Cost and service optimisations are a part of traditional service offerings. However, Isaksson (2012) mentioned an additional factor could play a role in the selection of transport operators and this is green service offerings. Another area that could play a role in a retailers selection of transport operators is CSR which thought to play an important factor nowadays in the market position of organizations (Luo and Bhattacharya, 2006). This is especially the case for retailers, since they are held more responsible for actions in the supply chain (Amaeshi et al., 2008).

### **1.3. Problem definition**

Transport operators fulfil a vital role in the integration of supply chains within industries, especially since many industries are becoming more globalised (Yan, Chaudhry, & Chaudhry, 2003). This means that the selection of transport operators has become an important decision making process where retailers such as those in France and Sweden may need to take green service offerings into account. The criteria for selecting suitable transport operators can conflict with each other and play an important role in the competitiveness of retailers (Akır, Tozan, & Vayvay, 2009). Deciding on which transport operator to use can depend on factors that can be different for each company, this can be the company size, sector of activity, and products (Akman & Baynal, 2014). To summarize, in the past, the main critical aspects of retailers were only traditional service offerings such as cost and service optimization without taking green service offerings into consideration (Chen & Wu, 2011).

Isaksson (2012) mentioned that including green service offerings could present transport operators with a potential business opportunity. Isaksson, Björklund, Evangelista, & Hüge-Brodin, (2012) agree with this and mention that in the long term it could eventually positively improve the image and company brand of not only the transport operators, but also their customers such as retailers. Moreover, customers of transport operators can have a significant influence on the implementation of green service offerings. However Wolf & Seuring, (2010) mention that there is a lack of willingness from the transport operators' customers to invest in these green service offerings. Traditionally, transport operators business operations have been mainly focussed on the optimisation of service and cost reduction since that has been demanded by their customers (Isaksson & Hüge-Brodin, 2010). This has started to evolve in recent years, with an additional service offering for the longer term, which is green service offerings (Isakson, 2012). Additionally, Amaeshi et al., (2008) explain that CSR is becoming important for retailers; therefore determining if it is linked to a retailer's choice of transport operator could offer valuable insights.

However there is a gap in research for these service offerings (cost, service, and the new additional factor, green service offerings) and what the relationship is between the service offerings. Additionally, how they are perceived by the customers of transport operators such as retailers in their purchasing decision making of transport services. Furthermore (Isaksson



& Hüge-Brodin, 2010) mention that even though the transport operators' customers play a critical role in the development of these green service offerings, little is known about what might motivate a European retailer such as one from France or Sweden to be willing to pay for green service offerings. Moreover, not much is known about the degree of importance of traditional service offerings and green service offerings when French or Swedish retailers are selecting a transport operator.

## **1.4. Research question**

The main research question can be seen below. This research question will guide the path to build up the thesis. The main research question will answer which service offerings (both traditional and green service offerings) are important for French and Swedish retailers when they are selecting a transport operator. Additionally, there is a lack of research attributed to whether or not they would be willing to use green service offerings and why this might be; consequently this will be investigated. Furthermore, green service offerings are a new element to the traditional service offerings of transport operators. Therefore, the author also wants to identify which green service offerings are important for French and Swedish retailers when selecting a transport operator. This results in the following research question and two sub questions.

Which service offerings are important for French and Swedish retailers in their selection of transport operators?

- Are the retailers willing to use green service offerings and why?
- Which of the green service offerings are important for French and Swedish retailers in their selection of transport operators?

## **1.5. Purpose**

The purpose this paper is to find out what the most important service offerings are for French and Swedish retailers in their selection of transport operators. It also aims to determine if French and Swedish retailers are willing to use green service offerings and explain why. Finally, it will attempt to identify which of the green service offerings are important to French and Swedish retailers in their selection of transport operators.

## **1.6. Limitations**

Since this paper will discuss the importance of green service offerings for French and Swedish retailers in their selection process of transport operators, the theoretical framework will be oriented on the French and Swedish markets and omit the remaining markets. Also, only lorries/trucks were considered and other transport methods were not included. Another limitation is the limited time period to complete the paper. Additionally, attempts were made to contact the headquarters of the sample companies. However, since they did not all reply, the point of sale stores were also approached. Furthermore, due to the relatively low response rate from the retailers, results from this study cannot be used to draw absolute conclusions. Instead, this paper can be used as an indication of the current opinions of French and Swedish retailers.

## **1.7. Disposition**

The layout of the thesis has been designed to respond to the research question as effectively as possible. The thesis starts with a detailed introduction that is composed of a background to the topic and a problem discussion. This section concludes with a research question and a methodology detailing the plan as well as any identified limitations. The next chapter consist of an in-depth review of the latest and most relevant literature from journal articles and reports as well as industry related websites. The following chapter will present the empirical data which has been obtained through questionnaires and interviews with the customers of logistics service providers in France and Sweden. An analysis of the literature and empirical findings will be conducted in the penultimate chapter. Finally, a concluding chapter will be written which aims to provide a solution to the research question. Furthermore suggestions for future research will be presented as well as reflections from the author.

## **2. Methodology**

*The methodology chapter describes the research approach of this thesis. This chapter will motivate the choices made by the author and identify how the results will be derived from the data. In each subchapter of the methodology different approaches are presented and the author presents which methods will be applied for this thesis.*

### **2.1. Scientific Perspective**

The research can be conducted based on two different approaches of using the findings from the empirical results. Those two different perspectives are the hermeneutic and the positivistic (Saunders, Lewis, & Thornhill, 2007). Both perspectives aim to connect phenomenon through theories thanks to empirical data.

#### **2.1.1. The Hermeneutic perspective**

This perspective is based on the fact that it is not possible to have a perfectly clear understanding and presentation of a situation from theory. According to the author Age, (2011) in order to understand, interpret and present conclusions from a phenomenon necessitates that the author or researcher will be aware of the fact that he will be subjective and have his own thoughts on it. This perspective can present alterations in the interpretation of the results due to the fact that it can interfere with the subjectivity of the author (Saunders et al., 2007).

#### **2.1.2. The positivistic perspective**

This perspective is mainly focused on a pragmatic approach of the theory through a methodological approach. The positivistic is then based on two possible ways to formulate conclusions. Firstly by being based on the logical aspect according to scientific methodology and secondly by using observations and experiment (Saunders et al., 2007). Thanks to this analysis conducted by using theory, it is possible to present and experiment hypothesis and thoughts in order to discuss and investigate solutions to the problems experienced in practice (Age, 2011).

### **2.1.3. Scientific perspective of this paper**

The thesis is based on a positivistic point of view as long as it is exploiting findings and information from existing literature on retailers, transport operators, service offerings (traditional and green). The use of this theoretical framework leads to a model suitable to the presented research question.

## **2.2. Research Approach**

Adams (2007) mentions that there are two main areas of research commonly used for reasoning and these are the deductive approach and inductive approach.

### **2.2.1. The deductive approach**

The deductive approach usually starts with a general topic or theory and allows the researcher to narrow it down to a more specific approach to address the theory and hypotheses (Saunders et al., 2007). In the literature it is also referred to as a top down approach, since the researcher starts with a theory and then narrows it down to a hypothesis, the next step is to narrow it down further to collect observations which support the hypothesis. The final step enables the researcher to test the theory and hypothesis through the empirical and theoretical analysis (Bryman & Bell, 2007).

### **2.2.2. The inductive approach**

The inductive approach is the opposite of the deductive approach (Bryman & Bell, 2007). It starts with a broad observation to discover patterns within the research (Saunders et al., 2007). The inductive approach is also referred to as the bottom up approach. The researcher observes and measures the patterns in order to formulate the hypotheses of the research, finally this will help the researcher to develop more general conclusions on the theory.

### **2.2.3. Research approach of this thesis**

The research approach of this thesis will be the deductive approach. The thesis starts with a background and problem discussion. This helped the author to identify gaps in current research. This allowed the author to narrow down the topic to the research question. Furthermore, an extensive review of the main concepts was conducted in a theoretical framework. Based on the findings of the theoretical framework a questionnaire was carried

out with the target companies for this thesis. The results of the empirical findings were then analysed and discussed. Finally the research question was answered in the conclusion.

## **2.3. Research Method**

The research method of a thesis depends on the information required to conduct an analysis, there are two different methods, qualitative and quantitative (Saunders et al.,2007).

### **2.3.1. Qualitative / Quantitative methods**

Qualitative is mostly used when it is necessary to have a detailed in depth vision of an activity, product, process etc. The data is collected in most of the cases through interviews and observations from the researchers. The research is conducted during a specified period of time and are then collected and analysed to grant a precise vision about a situation or problem (Levy & Lemeshow, 2008). The quantitative research method is conducted through questionnaires in most of the cases. This method is helpful when the aim of the research is to provide a numerical overview of a situation or sector of activity for example. The interesting aspect of this method is to be able to provide a possibility to generalize from a sample to a whole population the results obtained. Sometimes, in order to conduct a very precise analysis, both of the methods can be used in order to expose a deeper understanding of a situation. The quantitative data (such as the amount of people willing to pay for something) and qualitative data (such as the factors that will affect people when they will pay for something) can be used together (Saunders et al., 2007).

### **2.3.2. Research method of this thesis**

This thesis is based on quantitative research methods. The data collected from the quantitative method was used in order to collect and gather information about the current situation of Swedish retailers, transport operators and the services they provide. This method will provide a numerical overview of French and Swedish retailers and how important they perceive the service offerings of transport operators.

## **2.4. Population**

Population, according to Levy & Lemeshow (2008) encapsulates the set of people from whom the survey is aimed at and from which the data is extrapolated to analyse and

determine the outcome of the findings. It is possible to use a database when creating a sampling frame, however Saunders, Lewis, & Thornhill (2009) explain there are several issues associated with this method. First of all the database could be out of date, secondly the information could be incorrect and finally incomplete. It is important to mention the non-response bias, this is where a respondent declines the offer to participate in the survey for several reasons which could be; refusal, ineligibility, inability and unable to contact (Saunders et al., 2009).

#### **2.4.1. Population selected for this thesis**

The total population will not be represented by the respondents and the collected data could therefore be biased. It is also important to take into consideration the response rate of the questionnaire.

Approximately 360 French retailers were identified by the author and this figure decreased to 283 due to the fact that some were not eligible or unreachable. An email questionnaire (in French) was sent out to the eligible and reachable French retailers. Out of the 283, 30 replied. The author therefore decided to follow up by employing the services of acquaintances residing in the country to visit retailers and hand out questionnaires with a link to the online questionnaire. This increased the number of responses to 35. Finally, the author followed up one more time by sending out another round of email questionnaires and was able to retrieve 9 more completed questionnaires to bring the total to 44. This brings the response rate for French retailers to 15.5% which was calculated by dividing the number of responses by the sample size (44/283).

Approximately 270 Swedish retailers were identified by the author and this decreased to 231 due to the fact that some were not eligible or unreachable. An email questionnaire (in Swedish and English) was sent out to the eligible and reachable Swedish retailers. Out of the 231, 15 replied. The author therefore decided to follow up by visiting Swedish retailers and handing out questionnaires with a link to the online questionnaire. This increased the number of responses to 22. Finally, the author followed up one more time by sending out another round of email questionnaires and was able to retrieve 6 more completed questionnaires to bring the total to 28. This brings the response rate for the Swedish retailers to 12.1% which was calculated by dividing the number of responses by the sample size (28/231).

## **2.5. Sampling**

It is typically not possible to survey every single person to gather their individual responses. Therefore, to ensure the interests of the population being surveyed are fairly represented, sampling is used (Levy & Lemeshow, 2008). There are two well known sampling techniques available and these are probability sampling and non probability sampling (Saunders et al., 2009).

### **2.5.1. Probability sampling**

The probability or chance of each case that is selected from the total population is known and considered equal, it is referred to as a probability sample. It is commonly used for survey based papers where the researchers make interpretations from the sample of a population. The different probabilities techniques are described below (Saunders et al., 2009).

#### **2.5.1.1. *Random sampling***

A sample taken completely at random, this could appear in the form of a survey of people randomly in a street. It is possible to collect a large sample of data; however the main drawback to this method is reliability. Biggam (2011) suggests the more random the sample the better since collecting data from one location at a specific time of day may not represent the greater populations' beliefs.

#### **2.5.1.2. *Simple random sampling***

Similar to random sampling with the main difference being the need to provide each member of the population being surveyed an equal chance to be questioned. The idea being that if a survey is conducted using the *random sampling* method; one particular group could be questioned such as retired or unemployed people. This method aims to represent a greater variety of the population and have a more random sample (Levy & Lemeshow, 2008).

#### **2.5.1.3. *Systematic sampling***

The idea behind systematic sampling is to use a method which samples a population at certain intervals. Examples of this type of sampling could be every tenth person to walk past the sampler in a street, or every sixth number on a list etc. (Biggam, 2011).

#### **2.5.1.4. Stratified sampling**

A different take on sampling, where a population is divided into groups or ‘strata’ which contain similar properties and then a sample is taken from each stratum. Examples could include age, gender, race etc. (Solanki & Singh, 2015).

#### **2.5.1.5. Cluster sampling**

Comparable to *stratified sampling* in so much as populations are grouped into ‘clusters’ or ‘strata’ (Biggam, 2011). However, instead of taking a sample from each cluster, a sample is taken from random clusters (Levy & Lemeshow, 2008).

### **2.5.2. Non probability sampling**

The main difference between probability and non-probability sampling is that for non-probability sampling each case being selected from the population is not known. The techniques to select the samples are based on the assumption that the researchers will choose the sample randomly (Saunders et al., 2009). Several authors mentioned that the issues with sample size is vague and therefore there are no clear rules. This means that there should be a logical relationship created between the chosen sample technique and the focus/purpose of the research paper (Saunders et al, 2009 and Biggam, 2011). The different probabilities techniques are described below.

#### **2.5.2.1. Self-selection sampling**

With self-selection sampling the researchers allow the possible participants of the survey to decide for themselves whether or not they would like to participate. The researchers therefore need to explain why the research is being conducted and this can be done by either asking the participants to take part or by promoting through suitable media. This will allow the researchers to collect all the required empirical data from the respondents (Saunders et al., 2009).

#### **2.5.2.2. Quota sampling**

Is a different approach to sampling than that the previous methods and is also known as ‘non-probability’ sampling. It can be seen as less reliable due to the fact that it does not take a random sample. Instead it relies on a predetermined ‘quota’ as a sample. An example could be a specific age group of males being selected in the street rather than a random selection of the population (Patton , 2002).



### 2.5.2.3. Convenience sampling

Another non-probability sampling method which is used for convenience purposes is convenience sampling. It is often used by people who have specific access to populations. Examples include a survey of the people working within one company where the surveyor works (Biggam, 2011).

### 2.5.3. Sampling method used for this thesis

The sampling method used for this thesis is non-probability sampling. The most appropriate non-probability sampling technique for this thesis is convenience sampling. This decision was based on the practicality of obtaining sufficient empirical data within the allotted time frame. For this thesis, Swedish and French retailers have been selected.

As it is not feasible to gather data from every retailer in France and Sweden due to time constraints and budget limitations, a selection of the population was identified for data collection. Therefore, the population selected for this thesis was French and Swedish retailers and narrowed down to a smaller convenience sample (see figure 5).

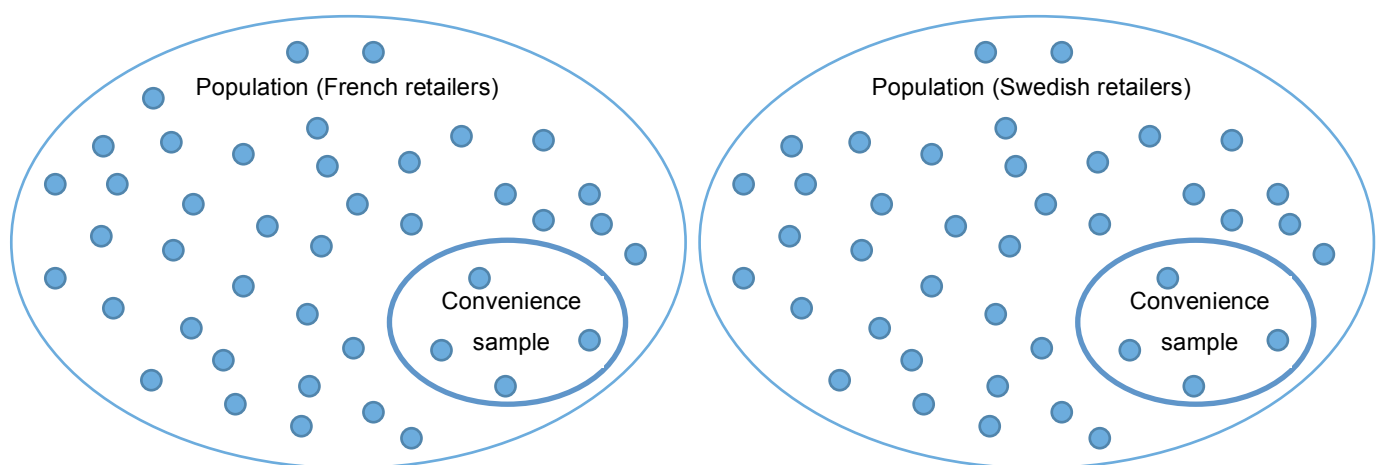


Figure 5: Visualisation of the population and convenience sample of French and Swedish retailers

French and Swedish retailers from eleven different sectors were selected and a questionnaire was emailed to a convenience sample. Furthermore, the author inquired as to whether or not the retailers wanted to participate in the empirical study. The author was able to identify retailers from a variety of sectors including; fashion, games and toys, house and garden furniture, electronics, convenience stores, supermarkets, automotive retailers, pharmaceuticals, cosmetics, beverages, sports and outdoor goods. Furthermore if the retailers

did not fit into these sectors of activity they had the possibility to define their sector of activity.

## **2.6. Data Collection**

The collection of data is a required technique and instrument for doing research. Two types of data are known, primary data and secondary data. The data collection is a critically important part of the thesis, therefore the right instrument needs to be selected that fit the research best (Jupp & Sapsford, 2006).

### **2.6.1. Primary Data**

Primary data is carried out when the data that is needed by the researcher is not available from published sources. The primary data is collected to address the research problem and is collected by the researcher. The researcher can select from a variety of techniques to collect the primary data. There are three commonly used methods to collect primary data; surveys, interviews and observations. A Survey or questionnaire is the most commonly used method of primary data collection (Phillips & Stawarski, 2008). Surveys are compartmentalised to samples of a population to understand more about their beliefs or attitudes. Surveys consist of several questions that are constructed by the researcher, these questions can be open ended or closed, depending on the research.

Interviews can be classified as a conversation between the researcher and the participants with an overall purpose. Interviews can be put into three categories, informal interviews, conversational interviews and general interviews (Patton, 2002). The main goal of an interview is to collect data from the participant and to see what the participant's perspective on the research topic is (Patton, 2002). An observation is a systematic way of taking notes, records of an event or behaviour. Observation can vary from a systematic structure, behavioural checklist through a detailed notation or by a more holistic approach (Krishnaswamy & Satyaprasad, 2010).

### **2.6.2. Secondary Data**

Secondary data is the opposite of primary data and the information for secondary data is available through different sources and studied by the researcher (Phillips & Stawarski, 2008). The purpose of secondary data is to extract information from previous studies or from

other sources (Krishnaswamy & Satyaprasad, 2010). It is a descriptive way to support the research findings of the researcher.

### **2.6.3. Data collection for this thesis**

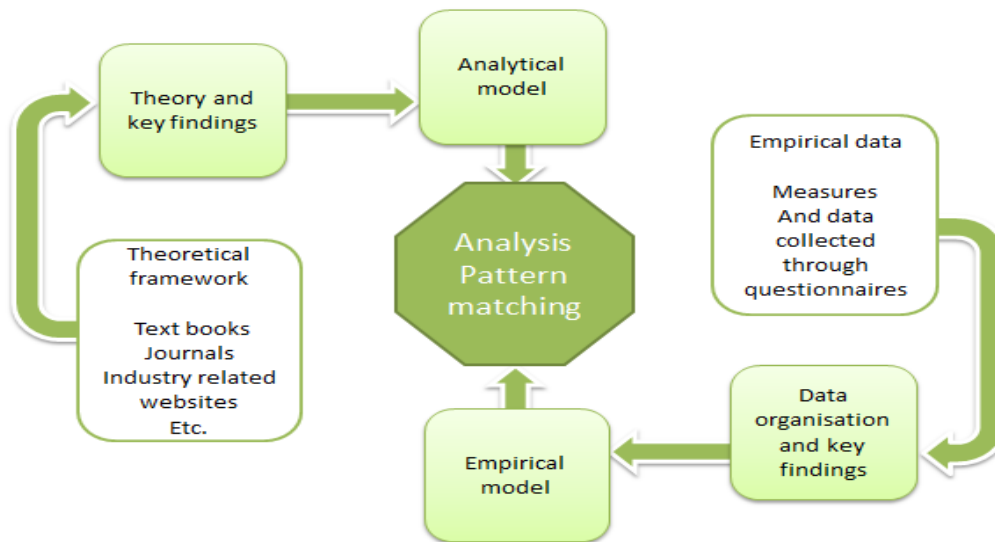
The data for this thesis will be primary and secondary data. Primary data will be used to collect the empirical data. The primary data will be collected through questionnaires and in order to reduce non-response bias the questionnaire has been translated into Swedish, French and English and sent out to the respective countries. The secondary data will be collected through industry related websites, books and academic peer reviewed articles from Linnaeus University search engine, One Search.

### **2.6.4. Questionnaire design**

A questionnaire with twelve questions was created using google docs online survey tool to collect the empirical data required to conduct an analysis to answer the research question. The responses to a questionnaire can either be fixed response or open response. A fixed response provides the participants of the questionnaire a series of choices to choose from provided by the author (Thomas, 2004). It includes a mix of checklist, rating scales or ranking performance. Fixed response questions were chosen because the author believes that they would be the most effective technique to collect the necessary responses. The author chose not to offer the option to provide a non-answer as in the term 'neutral' for the scale questions. This was because the author wanted to know how the participants feel about the topic and a neutral answer would prevent this. Furthermore, a Likert scale was used for the rating scales, which consisted of the following; 4 Very important, 3 Important, 2 Not that important and 1 not necessary.

## **2.7. Analysis Method**

Once the data have been collected, it is necessary to process them in order to exploit and make the data relevant to allow any trends and relations to be identified. One method for doing this is pattern matching. This involves linking two patterns or models, one being theoretical, the other being observed from empirical research (Saunders et al., 2009). Figure 6 shows the author's own representation of this process.



**Figure 6: Pattern matching analysis method**

In order to analyse the findings from the literature and the empirical data, descriptive statistics will be applied. Descriptive statistics will help to present the quantitative data in a clear way. The descriptive statistics used for this thesis will be standard deviation and mean. According to Saunders et al (2009) the mean is the average value of the data and is used to describe central tendencies. The standard deviation is used to measure how spread out the data is around the mean. To analyse the data IBM Statistical Package for the Social Science (SPSS) was used for the descriptive statistics and to measure the reliability and correlation by applying Cronbach's Alpha and Pearson correlation coefficient.

## **2.8. Scientific Validity and Reliability**

There are three different kinds of validity to analyse in order to evaluate if a thesis is relevant to the research question and the researchers assumptions that will be done. Those three different kinds are the internal, external and construct validity (Golafshani, 2003).

### **2.8.1. Validity**

*The internal validity* can be useful when evaluating the link between two elements that are affecting, influencing each other, in other words when observing a cause and effect relationship. It is of crucial importance that the conclusions are made thanks to measurable data and to avoid any assumptions that could explain the link and effects between two different events (Drost, 2011). According to Saunders et al., (2009), internal validity refers to the ability of what the questionnaire is measuring is what the researcher is intending to measure.

*The external validity* helps to define if the conclusions formulated within a thesis can be relevant and used in similar situations and cases that can be described in other thesis. The results from the empirical study are based on analytical generalization from the data collection and will be applied to generalized theory. A thesis is habitually stated to provide a good basis for generalizing the results and key findings as long as it is not designed for a single company (Carmines & Zeller, 1979).

*The construct validity* is related to the objectivity of a thesis. In effect, the judgement and conclusions exposed in a thesis can be biased if the researchers have a subjective point of view when collecting the data. This situation can be avoided by collecting information from as wide a range of sources as possible (Drost, 2011). The case study may also be read and discussed with the interviewees.

### **2.8.2. Validity of this thesis**

The internal validity of this thesis in relation to the questionnaires is high since the questionnaire measures what the author intends to measure. The author intends to measure the importance of green service offerings when French and Swedish retailers are selecting transport operators. Several measurement questions have been included in the questionnaire to ensure that the internal validity is high. The focus of this thesis was on France and Sweden, therefore the external validity is only relevant for these two countries. The results and key findings can be generalized for a different market or country. The construct validity attempts to be as high as possible since the author had an objective point of view when collecting the data. Moreover, the thesis is based on a range of information coming from different sources. Furthermore, Pearson correlation coefficient has been applied to test if the measures of constructs in the questionnaire are related to each other.

### **2.8.3. Reliability**

The reliability of a thesis is improved when the results and main findings can be repeated under the same circumstances and the same result is found. In order to make this possible, a thesis must be conducted in a precise and viable way. This can be done by following protocols and use all the forms of check up to avoid any confusion during the data collection process. The thesis can then be as reliable as possible and other researchers could find the same outcome (Saunders et al., 2007).

#### **2.8.4. Reliability of this thesis**

In order to ensure the reliability of this thesis, several precautions have been taken. The questionnaire has been designed to be as clear as possible, based on the main findings from the theoretical framework and the analytical model. Moreover clear definitions were given in the questionnaire in order to avoid misunderstandings; this is done in order to eliminate the probability that the respondents could interpret a question in a different way. All these precautions were taken in order to avoid any confusion. Additionally, the questionnaire was translated into French and Swedish to reduce the chances of respondents not understanding the meaning of the questions and to achieve as higher a response rate as possible. However, due to the emerging nature of the topic, if the research were to be conducted in a future time period, it is possible that different findings could be made. Furthermore, the internal consistency has been analysed by applying Cronbach's alpha. Cronbach's alpha is used to measure the scale reliability and to see if a set of items are closely related (Saunders et al., 2009).

#### **2.9. Ethical Considerations**

The data used for the thesis has been collected in an ethical way. The collection of the quantitative data was conducted anonymously. Furthermore, the participants of this thesis did not receive any form of payment for the data collection and they will have the possibility to receive the results of the questionnaire.

### **3. Theoretical framework**

*In order to answer the research question in as much detail as possible, a thorough review of the main literature has been conducted. The main concepts that will be reviewed are based on the research question. Therefore, the following topics will be discussed in this chapter: first of all, the role of a retailer within a supply chain will be discussed. This leads on to a description of the French and Swedish retail industry. Then, transport operators will be investigated followed by the selection process of a transport operator. Finally, an analytical model is presented.*

#### **3.1. The role of a retailer within a supply chain**

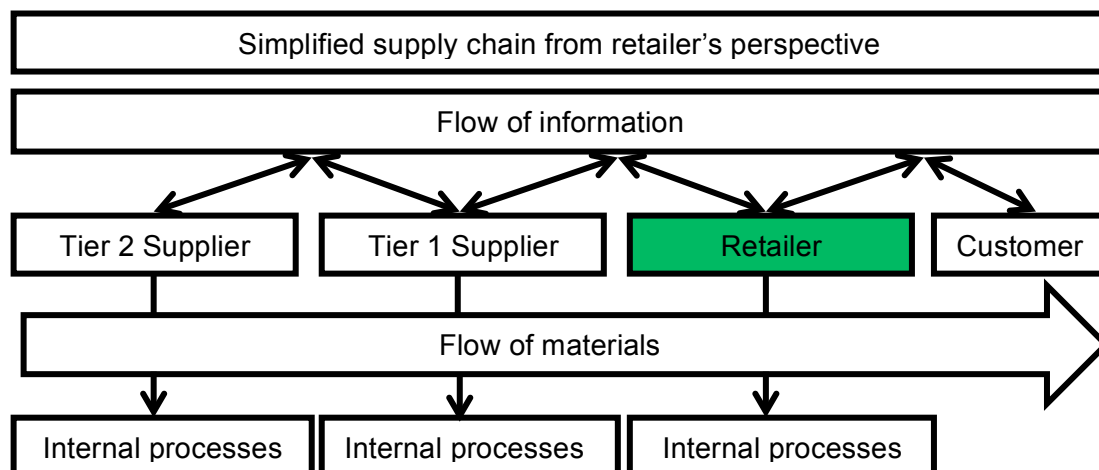
A supply chain as defined by Jonsson (2008) encompasses the flow of materials from the beginning such as a raw material supplier and services required to fulfil the order requirements of customers. Typically the activities within a supply chain are made up of transport management for inbound and outbound services, warehousing, the handling of materials, fulfilment of orders, designing and developing logistical networks, management of inventory, supply and demand planning as well as organisation / management of logistic service providers (CSCMP, 2014). From a more logistics management perspective, activities ranging all the way from sourcing to customer service can also be included, but ultimately logistics is an integral part of what is more commonly referred to as supply chain management (Grant, Wong, & Trautrimis 2013).

In order for retailers to be successful, it is crucial that they operate with an efficient and effective up and down stream supply chain (Lorentz & Lounela, 2011). According to Lorents and Lounela (2011) logistical services are important for retailers and suppliers because they can create competitive and differentiation advantages. Logistical performance is important due to the reasons that it can increase customer satisfaction and customer loyalty for a retailer (Schramm-Klein & Morschett, 2006). Participants in a supply chain can improve their logistical performance by outsourcing parts or all of their logistics to a party that is specialized in this area like a transport operator. Moreover, Ganesan et al (2009) mentioned that corporate social responsibility is a critical factor for the market positioning of retailers.

The management of a supply chain allows a connection between the business processes of the actors and improves the coordination of their activities. This could be achieved for example

through enhancing the integration of information flows amongst the supply chain actors such as retailers and transport operators (Christopher, 2011). Retailers have a strong position in the supply chain and are often seen as the responsible party (Amaeshi, et al., 2008). Within a supply chain there are typically several actors who provide different services to each other. An example of a supply chain might include a raw material supplier, manufacturer, wholesaler and a retailer. The perspective of this paper focusses on the retailer. According to Jonsson (2008) a retailer is located downstream in a supply chain and is usually the last echelon. A retailer typically operates in the business to consumer environment and sells products to consumers.

Martinsen (2014) explains that actors within a supply chain have differing levels of influence over each other (Figure 1). A retailer could have a strong influence on the upstream supply chain actors. Moreover, a retailer could have an influence over the services which links it to another actor, an example of such a service could be a transport operator (Hertz & Alfredsson, 2003). Continuing with this train of thought, Jonsson (2008) explains that there is an integration of material flows and flows of information between actors, such as retailers and their suppliers within supply chains. The following figure (7) provides a representation of a supply chain from a retailer’s perspective with two tiers of suppliers and one customer tier.



**Figure 7 Author own interpretation of simplified supply chain from retailer’s perspective**

It has also been proposed that SCM has evolved to be non-linear, this refers to the management of an upstream and downstream linked network which is driven not by supply, but demand (Christopher, 2011). Demand from supply chain customers as well as end consumers can play a major role in a company such as a retailers’ decision to improve its



green image. This is because customers are more aware than ever of the impact business activities are having on the environment and this is resulting in a shift in attitudes towards purchasing decisions and putting more pressure on businesses such as retailers to respond (Sharma & Jain, 2014). Within a demand driven network, it is the customer who has the influence to make change happen. For example, in order to reduce prices for customers, supply chain networks have developed and evolved to maximise efficiency gains and thus allowing cost savings to be passed on to customers (or risk losing customers to more competitive rivals) (Christopher, 2011). Therefore, if a customer expects a retailer to be more environmentally friendly, the retailer will be influenced into taking action in order to adapt their services to meet the needs of their customers (Srivastava, 2007).

### **3.2. French retail industry**

France can be considered as one of the most influential markets in Europe when regarding the retail industry (Perrigot & Barros, 2008 & Worldbank, 2015). French retailers continue to expand into other countries in Europe; however they face competition internally from other French retailers as well as from external competitors from other countries, especially from the German and British markets (Perrigot & Barros, 2008). The retailers operating within the country are composed of two main actors; these include the large retailing stores and the traditional smaller retailers (Euromonitor International, 2015). The contribution to Frances' GDP from retailers is significant; it is around 25% which is close to 400 billion Euros (Euromonitor International, 2015).

Moreover, there is a threat of new entrants in the French retail industry (Euromonitor International, 2015). The competition is increasing in the non-grocery sector of the French retail industry; this is due to apparel fashion retailers from abroad entering the French market, which leads to intensified competition. In the grocery sector of the French retail industry large local food chains are creating a competitive environment for smaller supermarket and also for convenience stores that cannot compete (Euromonitor International, 2015).

According to Lengart, Lesieur, & Pasquier (2010 ) the amount of goods being transported within French supply chains as being responsible for 1/3 of all co2 emissions for the entire transport sector. It has become apparent that emissions from transport are one of the main sources of co2 for the entire country of France. They account for approximately 35% of what

can be deemed as the total co2 emission output (International Energy Agency, 2009). Moreover, the optimisation of the logistics distribution plays an important role in France in order to reduce the carbon footprint, especially in densely populated cities like Paris. This is partially due to the larger quantities of goods sold and consumed in densely populated areas (Rizet, Browne, Cornelis and Leonardi, 2012).

### **3.3. Swedish retail industry**

Within the E.U, Sweden is ranked as ninth in terms of gross domestic product (GDP) and size of economy (Hultman & Elg, 2013). There are a lot of changes occurring in the Swedish retail market, Hultman & Elg (2013) mentions that due to a high degree of competition coming from new entrants into the Swedish retail market, a ‘fiercely’ competitive environment has emerged. This has created new challenges for Swedish retailers and put pressure on them to improve their supply chain activities. In particular, a focus on sustainability brought about by demand from more environmentally conscious consumers.

According to a recent market report from Jones, Lang & Lasalle (2013) Sweden’s economic performance including the retail market has outperformed most other European countries in recent times. This is in part due to the rapid expansion of retail stores, retail chains and international retailers. One explanation for this occurrence, presented by Bergström, Daunfeldt, & Rudholm (2006) is Sweden’s comparatively low level of barriers to entry when taking the retail sector into consideration. Swedish retailers, like retailers from other European countries have seen their traditional inner city centre customer base erode due to competition from out of town shopping centres, international competitors as well as a vibrant online market place (Bergström, Daunfeldt, & Rudholm, 2006).

It was also pointed out by Lang (2012) that from the 1990’s, out of town planning application rules eased in order to expand the Swedish retail market and this hastened the shift away from city centre retail development. The result of this has been the proliferation of very large shopping centres and “mega” retail chains (Waxell, 2014). Furthermore, it has been reported that the activities of retailers has a negative impact on the environment. Swedish retailers such as Coop (a large Swedish food retailer) have issues related to carbon emissions and these have been linked to the activities of their transport operations. In the case of this company, their transport activities have been responsible for 66% of their total carbon

emissions. By improving their transport activities and working together with transport operators Coop managed to improve carbon emissions efficiency in 2012. Even though their transport activities increased by 12%, their climate emissions only increased by 2% (COOP, 2012).

### **3.4. Transport operators**

Logistic service providers (LSP) can provide wide range of services like, transport operations, freight forwarding, handling, shipping and the storage and packing of different goods in the flow of logistics within a supply chain (Kilibarda et al., 2012). According to Martinsen (2014), LSPs are organizations that provide a service to companies to support the supply chain in overseeing the movement of products from the beginning of a process to the end destination.

There are several forms of LSP ranging from 1PL to 4PL. The 1PL is the most basic form, it can be an organisation or an individual transporting goods or people from one location to another location (Jonsson, 2008). The 2PL refers to the activities provided by carriers and transport operators (Jonsson, 2008). 3PL execute the more complex logistics activities in a supply chain. These may include solutions tailored for the customer. Furthermore, a 3PL fulfils the customers that desire to have a range of logistical services fulfilled by one single provider (Berglund, van Laarhoven, Sharman, & Wand, 1999; Skjoett-Larsen, 2000; Wagner and Sutter, 2012). The 4PL refers to organizations that carry out similar services as a 3PL. However, the main difference between a 3PL and 4PL is that, the resources for the physical handling are not owned by the 4PL, but usually purchased (Jonsson, 2008).

The main focus of the thesis is on transport operators which are categorised under the 2PL umbrella. The tasks and services of transport operators will be further elaborated on. The main task of a transport operator is to handle the transport from one location to another. The logistical service provided by a transport operator is usually a transport service and they own or lease the assets required for their business operations. The services provided for their customers are always related to transportation and this can include the handling of documents, scheduling, inbound and outbound transportation. A transport operator can be an airline, shipping line, railway or road operator (Jonsson, 2008). Transport operators offer a wide range of activities such as freight transportation, marketing activities, security and

safety, instant information and IT services, call centre management, reverse logistics, insurance, integration within supply chains, transfer of money, pre-assembly of products, modifications on the product, management solutions, inventory for customers, carrier selection for long distance transfers etc. (Yu, Elinger, & Haozhe, 2010 ).

#### **3.4.1. Service offerings of a transport operator**

Companies are facing increasing competition and the ways to stand out from competitors are limited. The service offerings from transport operators can offer the possibility of differentiation for their customers (Mojmir, 2000). There are traditional service offerings provided by transport operators and an emerging trend has seen green service offerings appear (Isaksson, 2012).

#### **3.4.2. Traditional service offerings**

Traditional activities of a transport operator include the transportation of goods and products and in some cases the storage in warehouses (Yu, Elinger, & Haozhe, 2010 ). Transport operators compete with one another by offering services that add value for their customers (Bø & Hammervoll, 2010). These services are referred to as traditional service offerings.

The first traditional service offering to be described is the cost of the services offered by a transport operator. The cost of services offered plays a role when customers of transport operators are making their transport selection decision (Cakir, Tozan, & Vayvay, 2009; Ozbek & Eren, 2012). This service could allow a company to increase its competitiveness. Companies such as retailers will look for the most cost effective way to transport their goods. This is especially true for customers who want to get the most value possible from the lowest level of investment (Hinterhuber & Friedrich, 2002). Another traditional service offering is the quality of the service offered. It is important that the transport operator is able to deliver a service that can match and meet the requirements of their customers (Lynch, 2000). A transport operator that is able to provide a consistently reliable service inspires confidence among its customers by ensuring their products and services arrive at the right time and right place (Lai, 2004). Furthermore, reliability is a service offering that is able to maintain or increase customer satisfaction and retention (Lynch, 2000). The next traditional service offering is lead time improvement. It can be vital for certain customers of transport operators that the lead time can be improved. This will ensure an overall increase in customer satisfaction and make the transport operators' customers more flexible (Kabir, 2012). Having a good reputation helps inspire confidence among customers. Furthermore a good reputation

can provide a transport operator with the possibility to attract new customers (Kabir, 2012; Cakir et al, 2009). The following table (1) lists the identified traditional service offerings.

<b>Traditional service offerings</b>
Cost of services
Quality of services offered
Lead time improvement
Reliability
Reputation

**Table 1: List of traditional service offerings from transport operators**

### **3.4.3. Green service offerings**

Transport operators have evolved over time and added extra services to their activities in order to fit the expectations of their customers. Another reason transport operators are expanding their service offerings to be able to differentiate themselves from their competitors (Hertz & Alfredsson, 2003).

Green service offerings are beginning to be integrated into transport operators overall offerings. This could be due to retailers and their customers that are taking environmental concerns more into consideration (McKinnon, 2010). Green service offerings as defined by Isaksson (2014) can be new or similar to traditional offerings of transport operators; however they aim to eliminate or reduce the impact they have on the environment. Examples include measures which are related to transport such as improving fuel efficiency of vehicle fleets by offering transport management solutions or shifting to alternative fuels. Other green offerings could be related to the design of logistical systems, systems to collect and manage environmental data such as emission levels. The green service offerings of transport operators can depend on the requirements of their customers (McKinnon, 2010).

Eco driving is a method used to reduce the environmental impact of the daily transport operations. Eco driving refers to a transport operator's ability to provide eco driving instructions to their vehicle operators when requested by their customers (Isaksson, 2012). Eco vehicles are considered to be a more environmentally friendly alternative to standard vehicles. They may consist of the following; alternative fuels, better environmentally friendly engines or adjustments to a vehicle (Wolf & Seuring, 2010). Transport planning management optimises transportation efficiency and make sure that the most optimal transport route is

planned. Through network collaboration and integration, knowledge of supply and demand can be transferred between actors in a supply chain to ensure that they use the most efficient form of transport planning. This in return can help to reduce costs and the impact on the environment (Stadtler, 2005). Moreover, transport planning management enhances distribution systems for example by combining orders and deliveries from different stores. Actual emission calculation is more of a technical service offering. It is used to measure and calculate the carbon emission impact from transportation (Elhedhli & Merrick, 2012). Carbon emission reduction and actual emission calculation are closely related to each other. Carbon emission reduction aims to reduce the impact of transport activities that generate carbon emissions (Elhedhli & Merrick, 2012). More efficient packaging solutions could help a company to reduce its impact on the environment. Some organisations are working with transport operators to find packaging that uses less volume and therefore fewer shipments will be required to send the same amount of products. This may offer a customer a good load optimisation which could reduce the amount of space in a transport vehicle needed to transport products. This could help to decrease the amount of journeys undertaken and this can decrease the amount of carbon emissions released through the transport activities (Carter, Kale, & Grimm, 2000). Environmental certification like the ISO 14001 standards could help a transport operator to provide evidence of its environmental credentials to its customers (Byrne, Ryan, & Heavey, 2013). This allows companies to not only present their customers with a transparent view of their activities, but the activities of their wider supply chains too. The appeal for companies to adhere to these ISO standards is high for those in particular who care about their image and how they are perceived in the eyes of their stakeholders. The latest standard 'ISO 14001' is mainly focussed on environmental impact and the consequences to the environment of running a business activity. ISO 14001 standards were designed specifically to deal with environmental management through improving business processes (not actual products) which affect the environment negatively (ISO, 2015). Environmental certifications could be especially beneficial for companies that have a portfolio of customers concerned about the environmental aspect or to attract new customers that could possibly be concerned about environmental issues (Yu, Elinger, & Haozhe, 2010 ). The following figure (8) outlines the process of the ISO 14001 standards which transport operators will have to adhere to if they wish to be ISO 14001 certified.

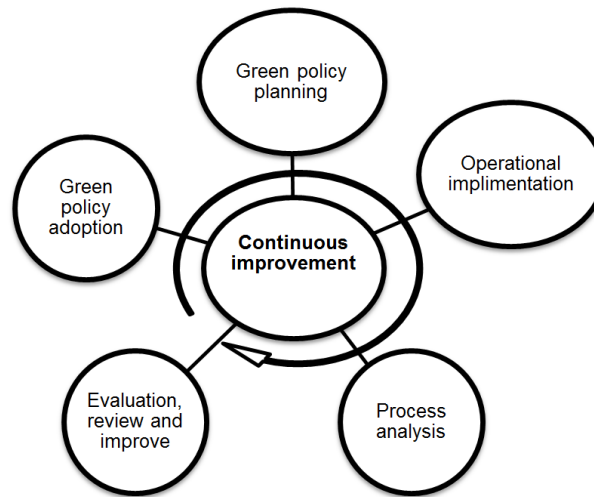


Figure 8: Author’s own interpretation of the ISO 14001 set of standards

The following table (2) lists the identified green service offerings.

Green service offerings
Eco driving
Eco vehicles
Transport planning management
Actual emission calculation
More efficient packaging solutions
Carbon emission reduction
Load optimisation
ISO certification
Intermodal transportation

Table 2: List of green service offerings from transport operators

### 3.5. The selection of transport operators by retailers

The selection of a transport operator for a retailer depends on the objectives of the retailer and on the considerations of the final customer (Yu, Elinger, & Haozhe, 2010 ). There are certain motivators which could encourage retailers to select certain transport operators (Chkanikova & Mont, 2015). Retailers are operating in a competitive and dynamic segment where there is a high pressure from stakeholders on sustainability issues which could encourage or motivate a retailer to improve their environmental practices. However, there are also certain reasons which could prevent a retailer from using green service offerings (Chkanikova, et al., 2013).

CSR is a topic that is important for companies across different industries; it still remains a difficult issue to tackle in business practices (Chabowski, Mena, & Gonzalez-Padron, 2011). This is especially the case for retailers, since they are held more responsible for actions in the supply chain (Amaeshi et al., 2008). Retailers are not only motivated to employ CSR practices because of laws, regulations or ethical motives. The main driving force is that their customers are becoming more aware of the retailers social responsible behaviour (Wagner, Bicen, & Hall, 2008).

CSR tends to be more complex in the retail industry than in other industries. According to Schramm-Klein, Morschett, & Swoboda (2015) the main reason for this is because the retailer usually is an intermediary in the distribution and marketing channel. This implies that the retailers CSR not only relates to their own activities, but also the responsible behaviour of supply chain partners such as suppliers and logistics providers (Homburg, Stierl, & Bornemann, 2013).

Therefore, the activities and behaviour of business partners of a retailer are perceived and associated by the end consumers to the products that the retailers sell. Due to the broad network of suppliers and logistics providers retailers try to avoid a negative carry over effect on their CSR, if their business partner's activities do not fit their way of conducting business in a corporate responsible way. Moreover, retailers are seen as the gatekeepers in a supply chain between the supply chain actors and the final consumers. This means that CSR has an influence on a retailer's selection of manufacturers, suppliers, distributors and logistics providers (Chabowski et al., 2011; Homburg et al., 2013; Schramm-Klein et al., 2015).

### **3.5.1. Motivators for the uptake of green service offerings**

Retailers who are seen as being environmentally conscious could expand their customer base by attracting consumers who are concerned about the impact business activities might be having on the environment (Murphy & Poist, 2003). According to Chkanikova et al. (2013), various drivers can influence Swedish retailers into engaging into more environmentally friendly practices. Expectations of customers can influence and increase a retailer's motivation to use green services, since their level of influence is high (Martinsen, 2014).

Governments are looking for ways to make their economies greener and encourage organisations to adapt to a green way of conducting business. Government deregulation could



help to reduce barriers to entry and ease the uptake of green services by increasing competition and through that improve efficiency and innovation (Lai, Cheng, & Tang, 2010). Economic incentives could encourage a company to try new services which they would not have considered before due to financial concerns. Economic incentives could include tax breaks or grants for organisations that fulfil the criteria set by the government (Darnall, Jolley, & Handfield, R.2008). Moreover these economic incentives may eventually improve the business activities of a retailer. Nordas (2008) mentioned that customers are largely seen as the main motivator to encourage retailers to use green services. This corresponds to Martinsen's (2014) findings which have been visualised in figure 1.

Retailers could also be encouraged to use green service offerings by their stakeholders and using green service offerings could also have an effect on their brand reputation. Stakeholders, as described by Freeman (1984) can be individuals or groups who, in one way or another are affected by, or (themselves) have an effect on the objectives of a company. Therefore, pressure from stakeholders can influence an organisations' decision making (Lee 2011). Robinson and Wilcox (2008) have identified that brand reputation may help organisations to have a competitive advantage; increasing their position in the markets they operate in. Moreover, by enhancing their brand reputation, retailers could appeal to a wider range of customers. Sustainability, green and carbon emission issues were listed by Robinson and Wilcox (2008) as having an effect on brand reputation. It has also been claimed by Claver, Lopez, Molina, & Tari, (2007) that organisations could be receptive to services such as green service offerings that could offer them a measureable improvement within their business activities.

### **3.5.2. Unwillingness to use green service offerings**

There are a number of challenges that companies face when attempting to adopt green policies to improve their activities, which include financial, regulatory as well as customer related issues (Srivastava, 2007).

From a financial perspective, the initial investments for the transport operator could increase the price of the green service offerings for retailers. Providing green service offerings could therefore increase the cost of the transport operator and these costs could be pushed onto their customers. Additionally, it may not be possible for a retailer to recoup these extra costs

(Chkanikova & Mont, 2015). The fact that some customers may have a lack of interest in environmental concerns could dissuade retailers from engaging with a transport operators with green service offerings. Gunn & Mont, (2014) mention that even though some consumers live in societies with a high level of concern for the environment, it does not necessarily translate to them choosing environmentally friendly products.

A lack of economic incentives could reduce the attractiveness of transport operators who offer green service offerings. Customers of transport operators may be unable to pay extra for green service offerings and therefore without support in the form of tax breaks or grants for example they may be restricted (Chkanikova et al., 2013). Unclear regulations could also result in retailers being less willing to choose a transport operator that offers green service offerings. This could be due to the fact that certain green offerings require specific regulatory controls which retailers for example cannot abide by or are unsure about (Chkanikova & Mont, 2015). The following table (3) lists the five identified reasons why a retailer may be unwilling to use a transport operator who provides green service offerings.

<b>Table of reasons French and Swedish retailers might be unwilling to choose a transport operator who provides green service offerings</b>
High initial investments
Uncertainty about the return on investment
Lack of customer interest / support
Lack of economic incentives
Unclear regulations

**Table 3: Unwillingness to choose a transport operator who provides green service offerings**

### **3.6. Analytical model**

The following model (figure 9) is a visual representation of the literature within the theoretical framework, it will be used to analyse the empirical data and discuss the outcomes. The model displays the selection of a transport operator from the perspective of French and Swedish retailers. The chapters related to each part of the model are mentioned into brackets. The first arrow leads to the different services offerings box identified through the literature. Into this box, to the left of the model the traditional service offerings of a transport operator are listed in a box and to the right are the green service offerings in another box. These are the service offerings which could come into play when a French or Swedish retailer selects a

transport operator. This leads to the selection of a transport operator box. Then the motivators to uptake green services offerings is displayed on the top right box for the retailers that could use green service offerings of a transport operator. This leads to the transport operator box on the top right, proposing green service offerings to the retailers. The unwillingness to use green service offerings is displayed on the left of selection of a transport operator box. This box lists the reasons identified in the literature for retailers to not use green service offerings. The arrow then goes to the top left transport operator box, showing the transport operators displaying traditional service offerings. Moreover, the analytical model will be the foundation for the design of the questionnaire used to collect data from French and Swedish retailers.

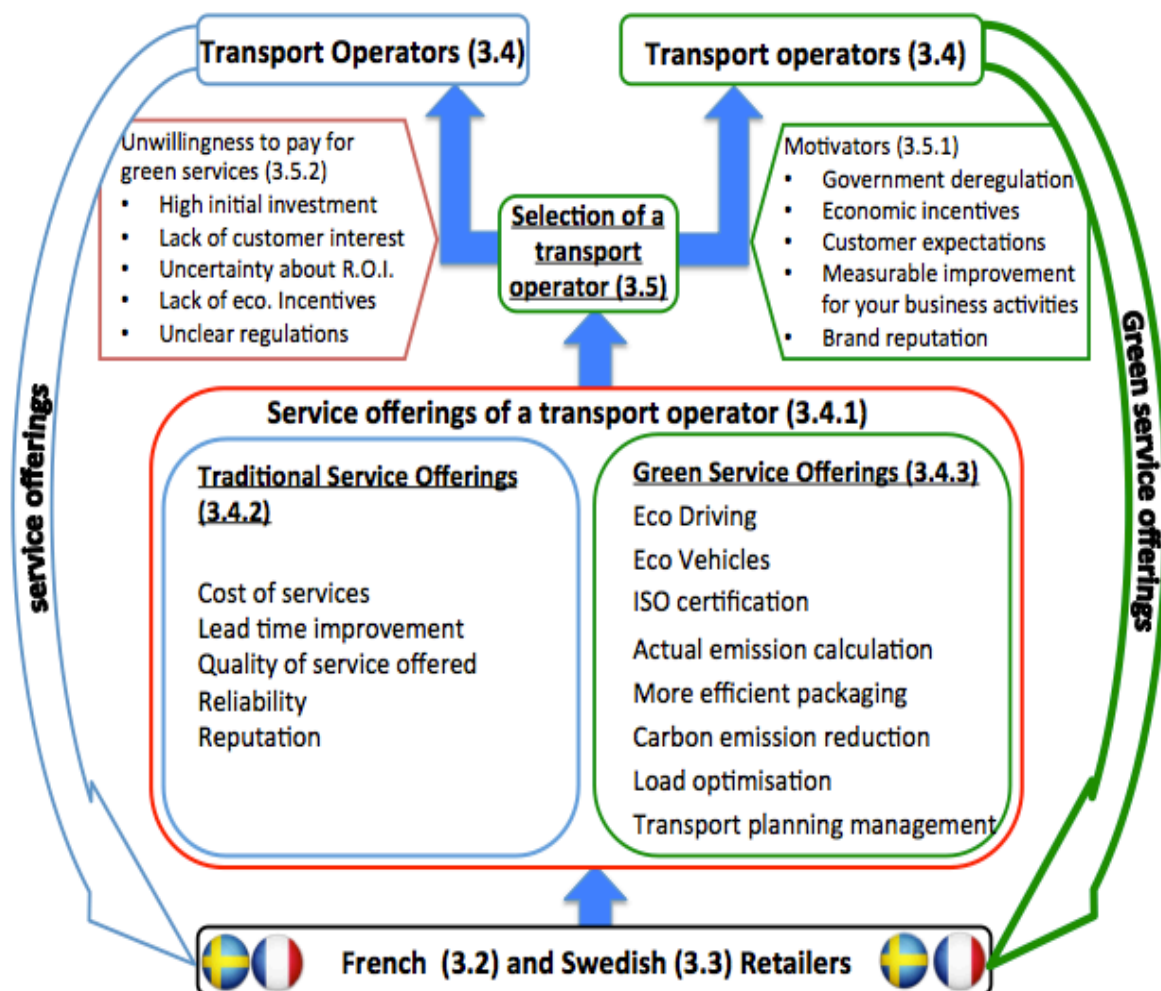


Figure 9: Authors analytical model

## 4. Empirical data

*This chapter presents the empirical data findings which have been collected through questionnaires. A brief overview of the respondents including their sector of activities and size will be presented. Then the data collected through the questionnaires will be presented by following the structure of the questionnaire. Moreover, for each of the questions, a comparison of the combined results will be made as well as the individual results of the French and Swedish retailers. Finally, in the last part of this chapter there will be a model summarising the key findings which will allow an expansion of the analytical model (Figure 8) which will be presented in chapter 5. The data has been collected through google docs' survey and analysed with SPSS.*

### 4.1. Respondents

In total, seventy two retailers responded and completed the questionnaire of which twenty eight were Swedish and forty four were French. In terms of percentage, the Swedish retailers represent 39% of the sample and the French 61%. The questionnaire consisted of twelve questions. Table 4 shows the number of employees for each of the retailers who responded. It is interesting to note that none of the respondents had more than forty employees at the time of the questionnaire.

	Frequency	Percent	Cumulative Percent
1 to 10 employees	17	23.6	23.6
11 to 20 employees	22	30.6	54.2
21 to 30 employees	15	20.8	75.0
31 to 40 employees	18	25.0	100.0
Total	72	100.0	

**Table 4: Respondents number of employees**

It is noticeable that the different sizes of the retailers are represented almost equally. The table 5 shows the different sectors of activity of the respondents. The supermarkets and convenience stores are highly represented in this survey and represent approximately one third of the sample with 20% for the supermarkets and 13% for the convenience stores respectively.

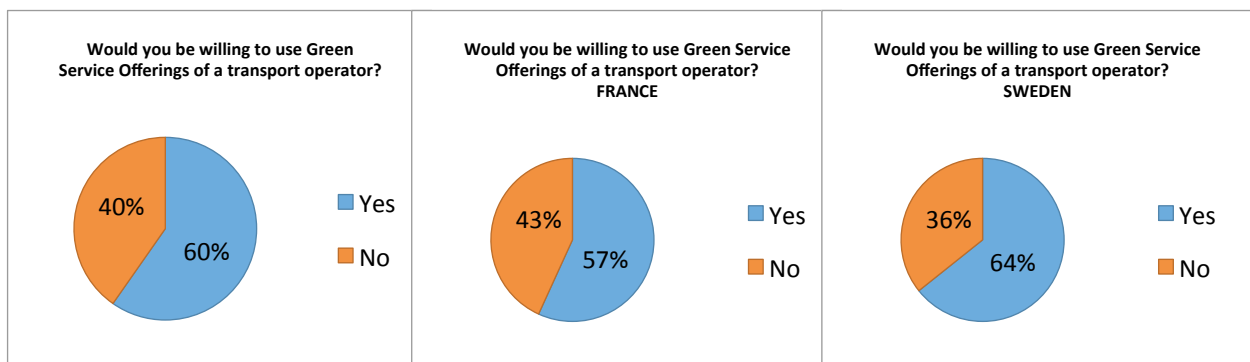
	Frequency	Percent	Cumulative Percent
Pharmacy	6	8.3	8.3
Cosmetics	3	4.2	12.5
Games and toys	6	8.3	20.8
Supermarkets	15	20.8	41.7
Beverages	4	5.6	47.2
Fashion	7	9.7	56.9
Automotive	3	4.2	61.1
Electronics	6	8.3	69.4
House and garden furniture	6	8.3	77.8
Sport and outdoor goods	6	8.3	86.1
Convenience stores	10	13.9	100.0
Total	72	100.0	

**Table 5: Respondent retail sectors**

## 4.2. Willingness to use green service offerings

The next section of the questionnaire was designed in order to make a distinction between the retailers willing to use green service offerings and those not willing to. This was done in order to be able to identify the reasons for those not willing to use particular services and the most important services according to them when selecting a transport operator. On the other hand, this division of the questionnaire was also done in order to identify the most important green service offerings according to those willing to use them and the reasons that could explain their motivation when selecting a green transport operator.

Chart 1 below presents charts of the responses from all the respondents collectively as well as the responses according to the country in which the retailers are operating in (France and Sweden). It is noticeable that most of the respondents were willing to use green service offerings with 60% of them responding positively to the question.



**Chart 1: Respondents willingness to use green service offerings (combined / French / Swedish)**

When looking in greater detail, a trend can be noticed when comparing the two countries. Apparently, the Swedish retailers are more willing to use green service offerings from transport operators than the French retailers. 64% of the Swedish retailers replied yes when only 57% of the French did. It could be related to the fact that Sweden is a country that is more aware of the environmental perspective.

### 4.3. Retailers not willing to use green service offerings

This section of the questionnaire was focused on the reasons why French and Swedish retailers are not willing to use green service offerings from transport operators as well as the most important criteria of selection when choosing a transport operator. Finally the last question in this section was designed in order to see if there was a correlation with the company's objective or corporate social responsibility and the fact that they do not want to use green services.

#### 4.3.1. Reasons for not being willing to use green service offerings

The respondents had the possibility to rank five different reasons between 1 to 5 (5 being the highest degree of importance) that could explain the fact that they are not willing to use green service offerings. The reasons were identified in the theoretical framework and the retailers have in general identified lack of customer interest, high initial investment and uncertainty about the return on investment as the three main reasons for not using green service offerings from a transport operator (chart 2). It is possible to see that when combined, the three selected reasons have a high standard deviation (between 0.75 and 0.86) highlighting the fact that they did not all agree about the degree of importance even if in the end they have collected most of the votes.

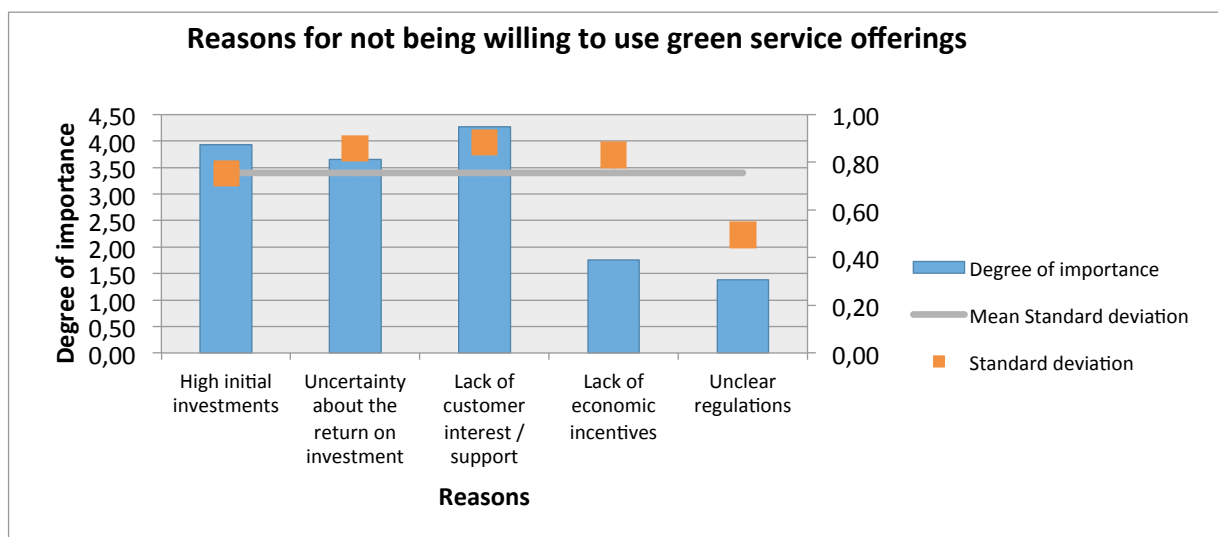


Chart 2: Combined respondents' reasons for not being willing to use green service offerings

The tendency is the same when considering the results from the French retailers with similar results, but the standard deviation was still above the mean standard deviation (chart 2).

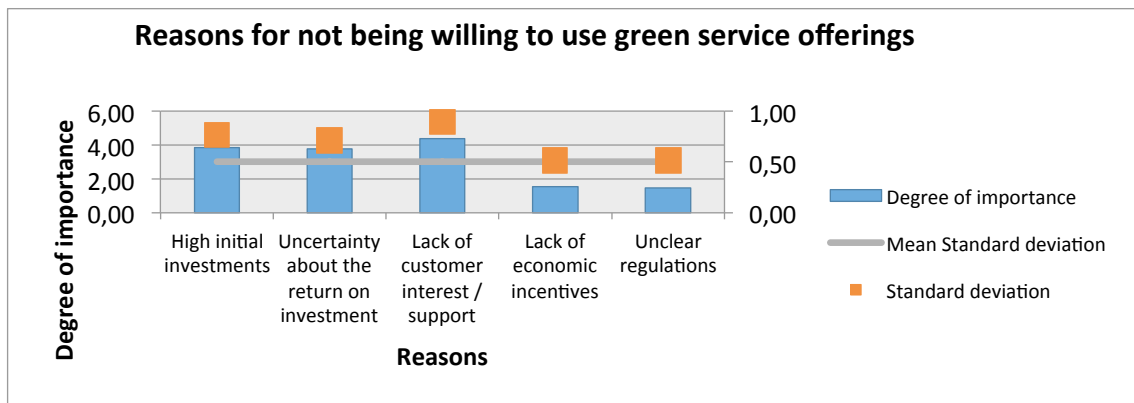


Chart 3: French respondents' reasons for not being willing to use green service offerings

The Swedish retailers have in their case ranked lack of customer interest, high initial investment at the same level and then uncertainty about the return on investment (chart 4). In the case of the Swedish retailers the standard deviation is higher in general showing a wide diversity of ranking.

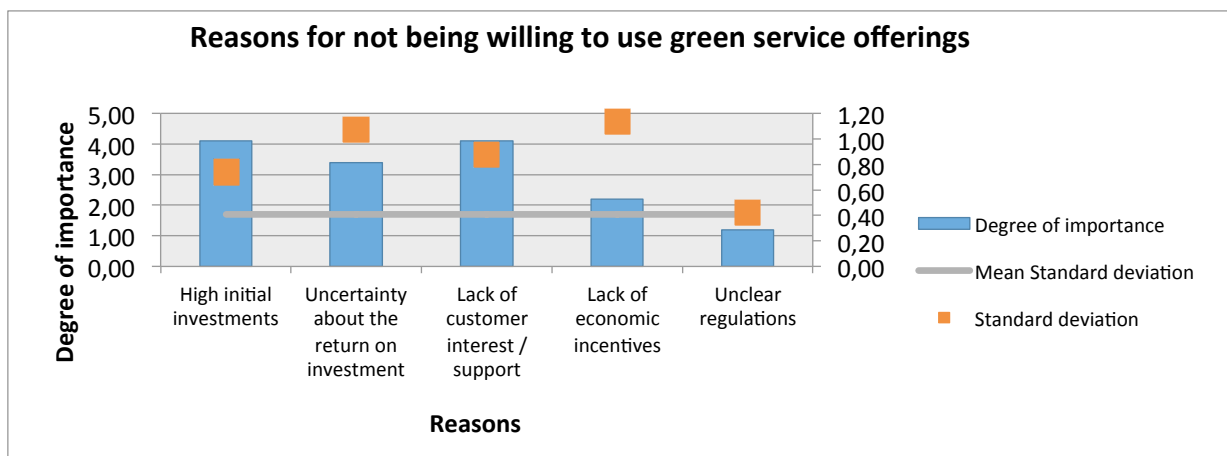
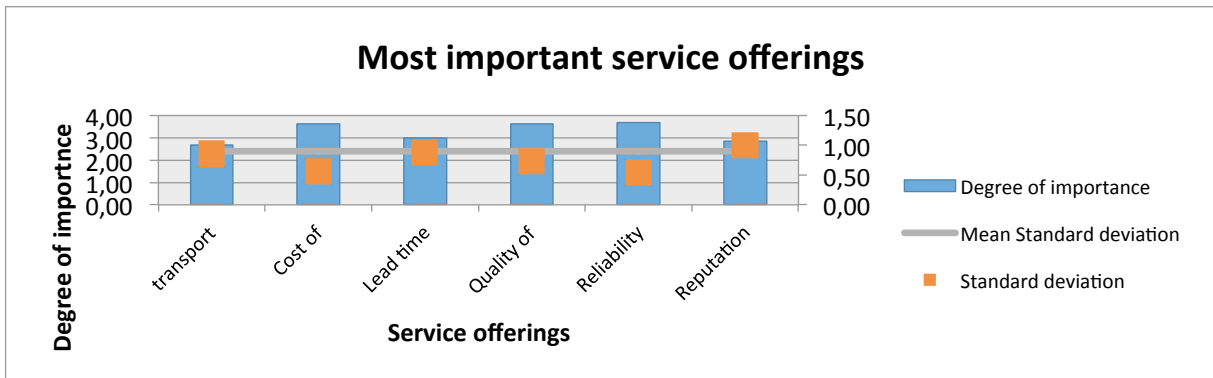


Chart 4: Swedish respondents' reasons for not being willing to use green service offerings

#### 4.3.2. Most important service offerings from transport operator according to the retailers

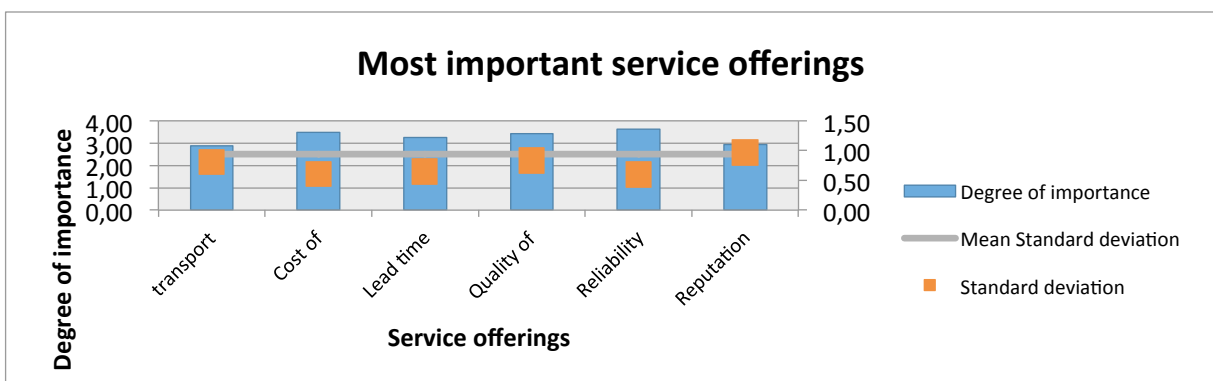
The retailers unwilling to use green service offerings were then asked to select the most important service offerings according to them when selecting a transport operator. Six different service offerings were used in the questionnaires which are based on the analytical model. These service offerings consist of traditional service offerings. Chart 5 shows the mean degree of importance for each of the service offerings. When looking at the mean, it

can be seen that cost of services, quality of service offered and reliability have been seen as very important when selecting a transport operator. Costs of services and reliability have a low standard deviation showing that they tend to agree on the degree of importance.



**Chart 5: Most important service offerings (combined responses)**

The French retailers (chart 6) agreed on these results but put more emphasis on the lead time improvement and in general have selected almost all the services as at least important. On average, the standard deviation does not show tremendous differences when looking at the mean standard deviation.



**Chart 6: Most important service offerings (French responses)**

The Swedish retailers clearly have a different vision with a clear distinction between the three main important services and the two others. Cost of services, quality of service offered and reliability have collected the majority of the votes. The three of them also have a very low standard deviation showing the fact that they agreed on this ranking (chart 7).



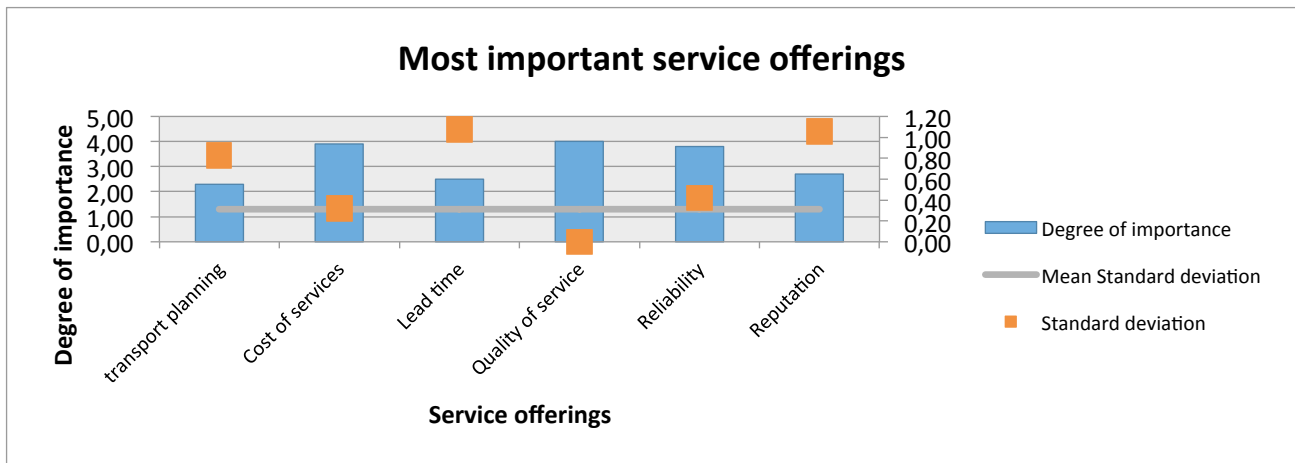


Chart 7: Most important service offerings (Swedish responses)

It was then possible to conduct a Cronbach's alpha analysis for all the retailers (table 6). The findings showed that the result is very low which could mean that internal consistency of the part is low due to the fact that the retailers found almost all the traditional service offerings close to the same degree of importance. Based on Cronbach's alpha which is a measure of reliability, 1 being high, 0 being low, the reliability is on the low end of the scale.

Reliability Statistics of service offerings

Cronbach's Alpha	N of Items
.064	6

Table 6: Reliability Statistics of service offerings

After conducting this analysis it becomes possible to determine if there are any correlations between the service offerings. This is possible when using the Correlation matrix using Pearson's correlation. Table 7 allows us to identify the correlations and also the intensity of each of the correlations. If the Pearson correlation is close to 1, it means there is a strong correlation if it is closer to 0 the correlation is not that strong. If the number is positive it means that when one variable is increasing the other correlated variable will increase. The opposite can happen when Pearson's correlation is negative. The second piece of information presented in the table is the Sig (2-tailed) showing if it is possible to notice a statistically noticeable correlation between two services. If the value is higher than 0.05 the variables are not related to each other (Hair, Black , Babin, & Anderson, 2009)

a. Listwise N=29		Transport planning management	Cost of services	Lead time improvement	Quality of services	Reliability	Reputation
Transport planning management	Pearson Correlation	1	.119	.285	.092	-.062	.117
	Sig. (2-tailed)		.539	.135	.636	.751	.545
Cost of services	Pearson Correlation	.119	1	-.215	.160	-.049	-.033
	Sig. (2-tailed)	.539		.262	.408	.802	.864
Lead time improvement	Pearson Correlation	.285	-.215	1	-.055	-.149	.081
	Sig. (2-tailed)	.135	.262		.775	.441	.675
Quality of services	Pearson Correlation	.092	.160	-.055	1	.325	-.273
	Sig. (2-tailed)	.636	.408	.775		.085	.151
Reliability	Pearson Correlation	-.062	-.049	-.149	<b>.325</b>	1	-.216
	Sig. (2-tailed)	.751	.802	.441	<b>.085</b>		.261
Reputation	Pearson Correlation	.117	-.033	.081	-.273	-.216	1
	Sig. (2-tailed)	.545	.864	.675	.151	.261	

Table 7: Correlation matrix

In this case the only noticeable correlation is between the Reliability and Quality of service offered. But the correlation in terms of variation is not close to 0.05. The correlation highlighted there could be linked to the previous results highlighted in chart (Chart 5).

#### 4.3.3. Is CSR playing a role when selecting a transport operator?

For the retailers not willing to use green service offerings it was then asked if corporate social responsibility or company's objective play a role when selecting a transport operator. The results showed in chart 8 clearly indicate that for 69% of the respondents it does not.

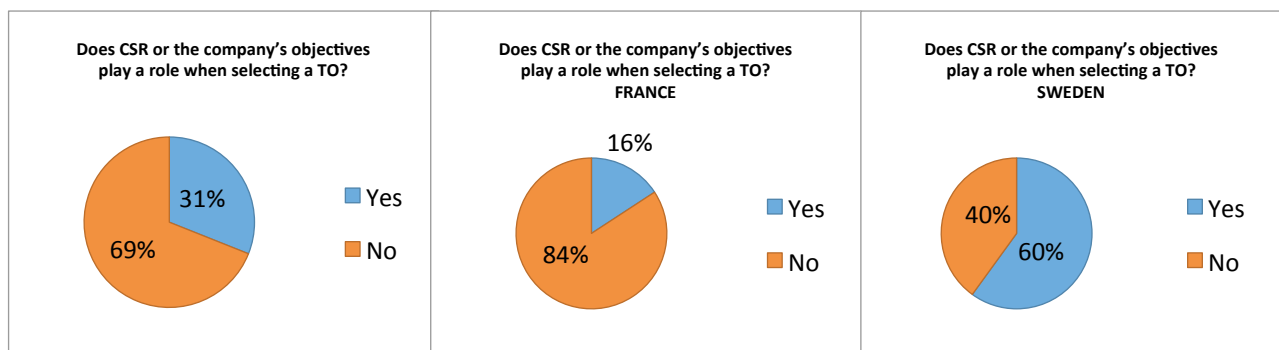


Chart 8: Role of CSR when selecting a transport operator

16% of them said “yes”. For the Swedish retailers the impact is clearly more important with 60% of the respondents answering “yes”. This could explain the answers found in the previous section of the questionnaire where more Swedish retailers in percentage terms said they are willing to use green service offerings from a transport operator.

#### 4.4. Retailers willing to use green service offerings

For the retailers willing to use green service offerings, various questions were asked in the questionnaire in order to find out which motivators are the most important for them when using green service offerings from transport operator. Then the retailers had the possibility to rank 14 criteria of selection when choosing a transport operator and finally to identify the most important green service offerings according to them as well as the role of CSR and the price of green service offerings.

##### 4.4.1. Reasons for being willing to use green service offerings

The retailers had the possibility to select between six different motivators in order to find out which are the most important (chart 9). They had the possibility to pick as many motivators as they wanted. The 45 retailers willing to use green service offerings from France and Sweden seem to have defined “customer interest” and “measurable improvement” for their business as being the most important. These two criteria have collected more than 35 votes.

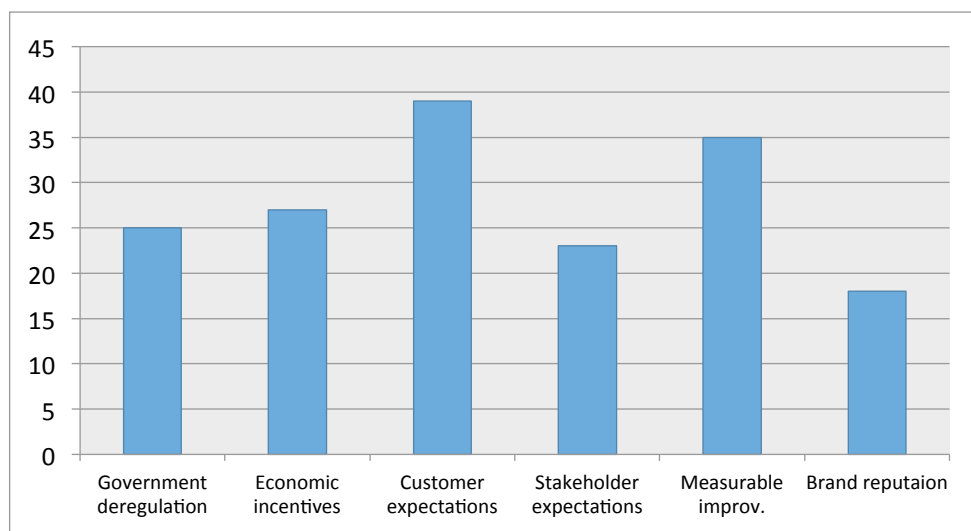


Chart 9: Reasons for being willing to use green service offerings (combined responses)

The French (left) and Swedish (right) retailers seem to agree on this ranking, even if the Swedish retailers have ranked economic incentives as being almost important (chart 10).

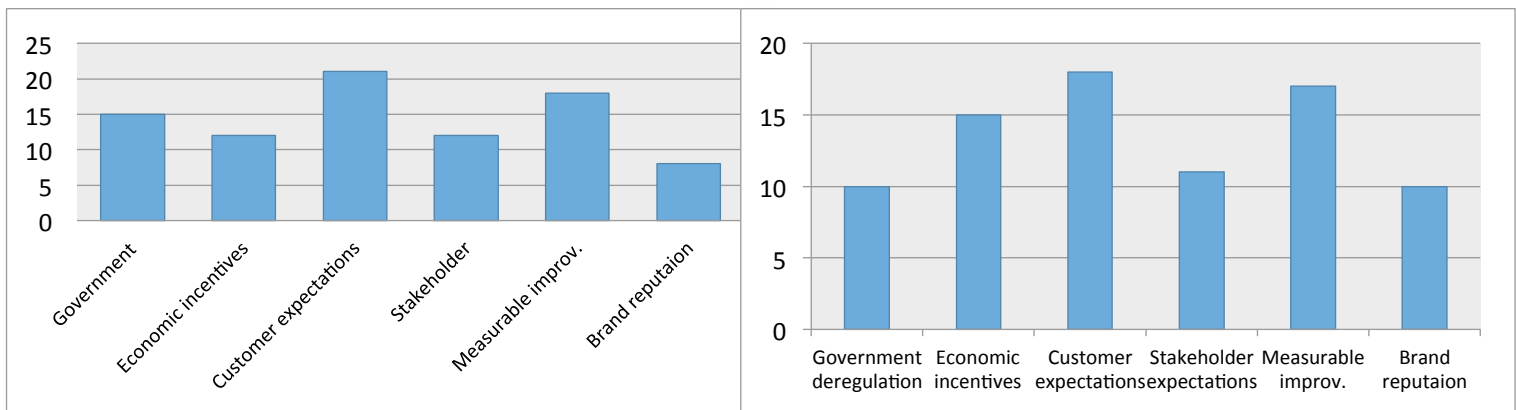


Chart 10: Reasons for being willing to use green service offerings (French responses left / Swedish responses right )

In general it is possible to notice that several respondents have picked various different motivators showing that they are more interesting in using green service offerings if there would be a significant improvement in business activities or help in any form.

#### 4.4.2. Most important criteria when selecting a transport operator

The retailers were then asked to indicate the degree of importance of service offerings when selecting a transport operator. The list of services was composed of 5 traditional service offerings and 9 green service offerings. Chart 11 clearly shows that the retailers seem to be unanimous in their decision about reliability since the mean is almost at the highest possible average and with one of the lowest scores for the standard deviation.

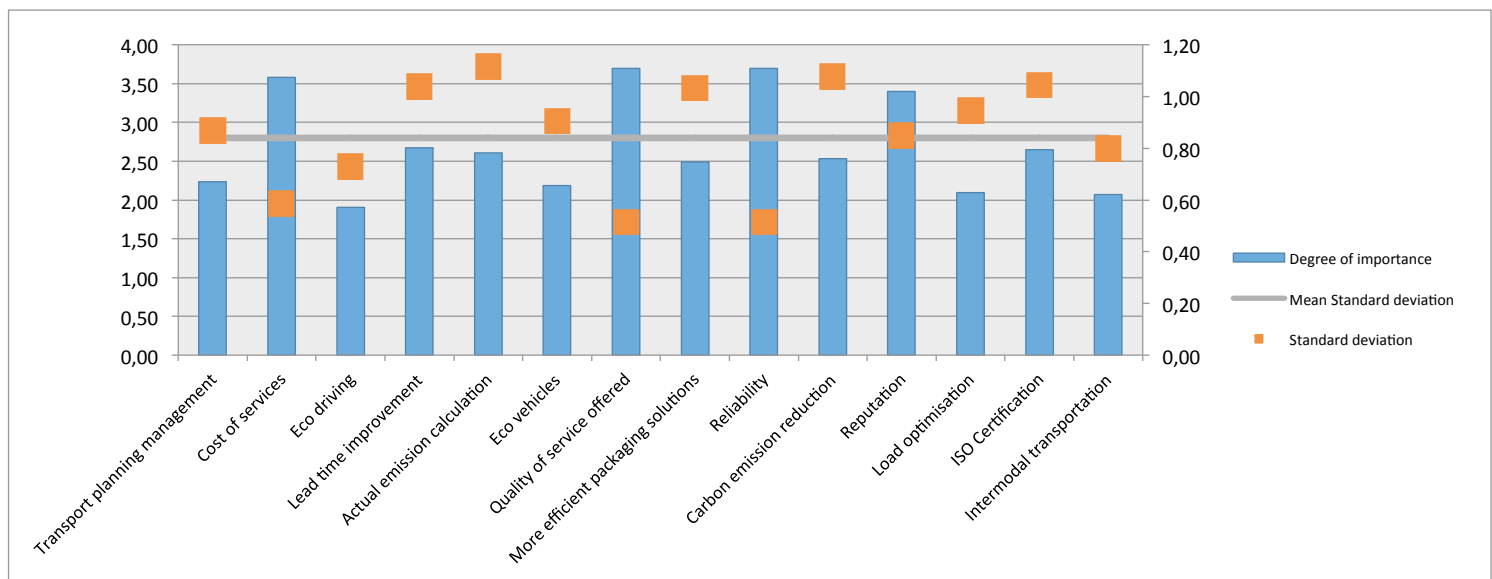
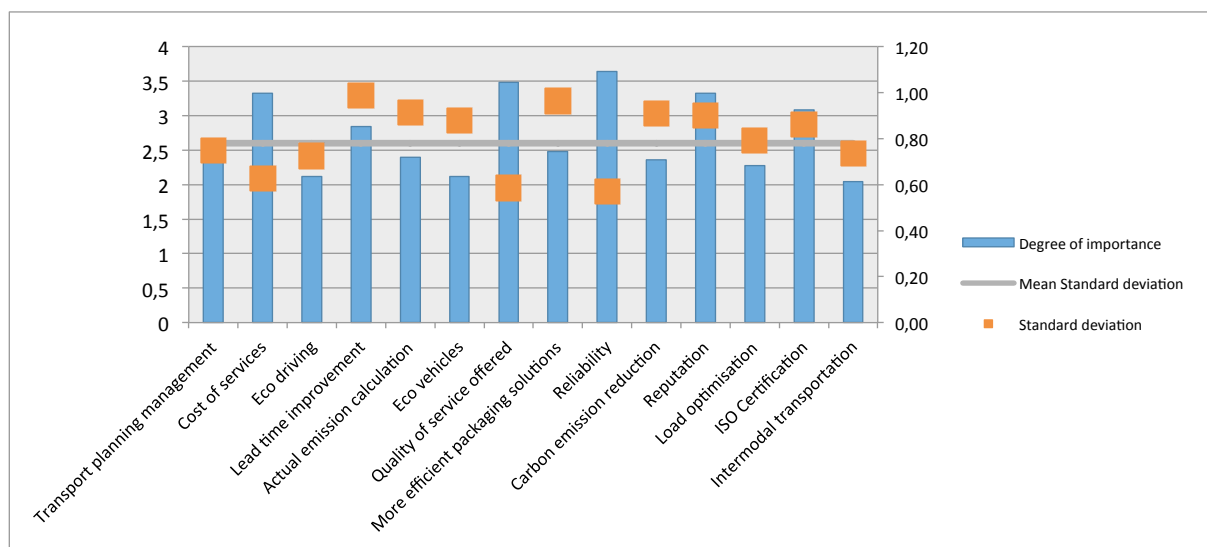


Chart 11: Most important criteria when selecting a transport operator (combined responses)

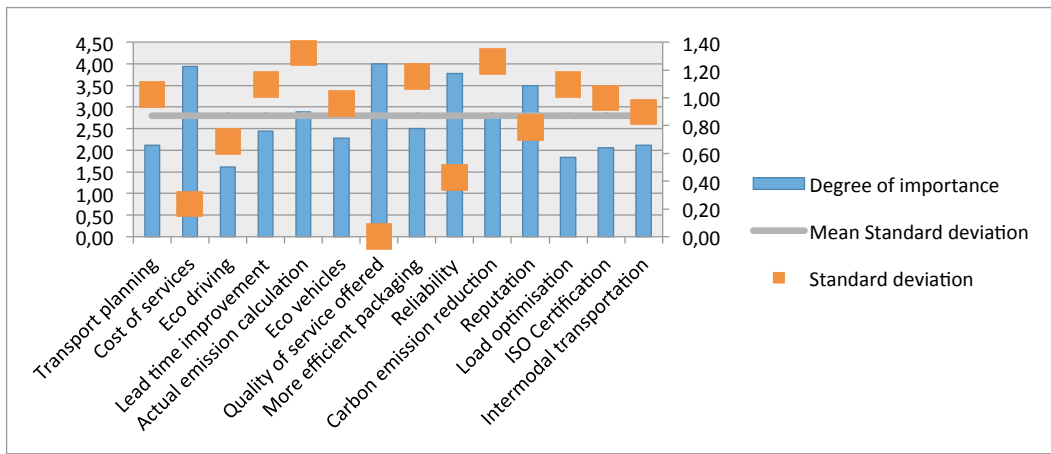
Therefore, the outcome of this figure seems to predominantly show that retailers find traditional service offerings more important than green service offerings. Four of the most important service offerings according to the retailers are traditional service offerings (reliability, cost of services, reputation, quality of service offered). Looking at the tendency of the standard deviation and the mean, the retailers seem to agree the most about these service offerings except for the reputation.

The French retailers agreed on this ranking with the same four services previously presented having the highest degree of importance (chart 12). It is noticeable that the standard deviation for reputation is above the mean standard deviation showing that most of the French retailers did not agree on this criterion. The three other services have on the other hand a low standard deviation which is shown in chart 13 displaying the results for each of the retailers.



**Chart 12: Most important criteria when selecting a transport operator (French responses)**

According to the Swedish retailers, reliability, cost of services, reputation, quality of service offered are the most important criteria when selecting a transport operator. In the case of the Swedish retailers it is noticeable that for these services previously listed, all of them have a very standard variation showing that they almost all agreed with this ranking except again for the reputation, but this time this one is below the mean standard deviation.



**Chart 13: Most important criteria when selecting a transport operator (Swedish responses)**

It was then possible to conduct a Cronbach alpha analysis for all the retailers (Table 8). The findings showed that the result is very low which could mean that internal consistency of the part is low due to the fact that the retailers found almost all the traditional service offerings close to a same degree of importance. Based on Cronbach’s alpha which is a measure of reliability, 1 being high, 0 being low, the reliability is above the half way point of the scale indicating a more reliable outcome.

**Reliability Statistics of service offerings**

Cronbach's Alpha	N of Items
.651	14

**Table 8: Reliability Statistics of service offerings**

After conducting this analysis it is possible to see if there are any correlations between the service offerings. This is possible when using the Correlation matrix using Pearson’s correlation. Table 9 allows us to identify the correlations and also the intensity of each of the correlations. If the Pearson correlation is close to 1, it means there is a strong correlation, if it is closer to 0 the correlation is not that strong. If the number is positive it means that when one variable is increasing the other correlated variable will increase. The opposite can happen when the Pearson’s correlation is negative. The second piece of information present in the table is the Sig (2-tailed) showing if it is possible to see a statistically noticeable correlation between two services. If the value is higher than 0.05 the variables are not related to each other (Hair, et al., 2009). In this case it is noticeable that Eco vehicles and Actual emission calculation are a lot correlated as well as reliability and quality of service offered. There is also a strong relationship between these two services as long as the Sig (2-tailed) is equal to zero showing that they are affected by the increase or decrease of the other service they are linked to.

		Transport planning management	Cost of services	Eco driving	Lead time improvement	Actual emission calculation	Eco vehicles	Quality of services offered	More efficient packaging	Reliability	Carbon emission reduction	Reputation	Load optimisation	ISO certification	Intermodal transportation
Transport planning management	Pearson Correlation	1	.034	.176	.311 <sup>+</sup>	-.079	.121	-.143	-.077	-.048	.046	-.281	.202	.150	-.098
	Sig. (2-tailed)		.829	.265	.045	.617	.445	.367	.627	.763	.773	.072	.199	.342	.537
Cost of services	Pearson Correlation	.034	1	-.218	.156	.172	.200	.434 <sup>**</sup>	-.023	.395 <sup>**</sup>	.128	.062	.050	-.184	-.037
	Sig. (2-tailed)	.829		.165	.323	.277	.205	.004	.884	.010	.420	.697	.753	.242	.818
Eco driving	Pearson Correlation	.176	-.218	1	.243	.464 <sup>**</sup>	.414 <sup>**</sup>	-.427 <sup>**</sup>	.133	-.432 <sup>**</sup>	.130	.032	.150	.110	.088
	Sig. (2-tailed)	.265	.165		.121	.002	.006	.005	.402	.004	.412	.843	.343	.487	.577
Lead time improvement	Pearson Correlation	.311 <sup>+</sup>	.156	.243	1	.233	.112	-.264	-.111	.121	.177	.108	.189	.100	.085
	Sig. (2-tailed)	.045	.323	.121		.137	.481	.091	.485	.444	.262	.497	.231	.528	.594
Actual emission calculation	Pearson Correlation	-.079	.172	.464 <sup>**</sup>	.233	1	.553 <sup>**</sup>	-.113	.128	-.318 <sup>+</sup>	.471 <sup>**</sup>	.312 <sup>+</sup>	-.193	.008	.276
	Sig. (2-tailed)	.617	.277	.002	.137		.000	.475	.421	.040	.002	.044	.220	.961	.077
Eco vehicles	Pearson Correlation	.121	.200	.414 <sup>**</sup>	.112	.553 <sup>**</sup>	1	.024	.335 <sup>+</sup>	-.037	.461 <sup>**</sup>	-.038	.058	.116	.343 <sup>+</sup>
	Sig. (2-tailed)	.445	.205	.006	.481	.000		.878	.030	.814	.002	.809	.716	.463	.026
Quality of services offered	Pearson Correlation	-.143	.434 <sup>**</sup>	-.427 <sup>**</sup>	-.264	-.113	.024	1	.269	.584 <sup>**</sup>	.108	.069	-.173	.369 <sup>+</sup>	-.062
	Sig. (2-tailed)	.367	.004	.005	.091	.475	.878		.085	.000	.497	.662	.274	.016	.694
More efficient packaging	Pearson Correlation	-.077	-.023	.133	-.111	.128	.335 <sup>+</sup>	.269	1	.249	.280	.226	.289	-.028	.102
	Sig. (2-tailed)	.627	.884	.402	.485	.421	.030	.085		.111	.072	.150	.063	.861	.522
Reliability	Pearson Correlation	-.048	.395 <sup>**</sup>	-.432 <sup>**</sup>	.121	-.318 <sup>+</sup>	-.037	.584 <sup>**</sup>	.249	1	.039	.104	.124	-.174	-.246
	Sig. (2-tailed)	.763	.010	.004	.444	.040	.814	.000	.111		.808	.512	.435	.270	.116
Carbon emission reduction	Pearson Correlation	.046	.128	.130	.177	.471 <sup>**</sup>	.461 <sup>**</sup>	.108	.280	.039	1	.195	.247	.301	.349 <sup>+</sup>
	Sig. (2-tailed)	.773	.420	.412	.262	.002	.002	.497	.072	.808		.216	.115	.053	.024
Reputation	Pearson Correlation	-.281	.062	.032	.108	.312 <sup>+</sup>	-.038	.069	.226	.104	.195	1	.060	.063	.204
	Sig. (2-tailed)	.072	.697	.843	.497	.044	.809	.662	.150	.512	.216		.707	.692	.196
Load optimisation	Pearson Correlation	.202	.050	.150	.189	-.193	.058	-.173	.289	.124	.247	.060	1	.393 <sup>+</sup>	.277
	Sig. (2-tailed)	.199	.753	.343	.231	.220	.716	.274	.063	.435	.115	.707		.010	.076
ISO certification	Pearson Correlation	.150	-.184	.110	.100	.008	.116	-.369 <sup>+</sup>	-.028	-.174	.301	.063	.393 <sup>+</sup>	1	.322 <sup>+</sup>
	Sig. (2-tailed)	.342	.242	.487	.528	.961	.463	.016	.861	.270	.053	.692	.010		.037
Intermodal transportation	Pearson Correlation	-.098	-.037	.088	.085	.276	.343 <sup>+</sup>	-.062	.102	-.246	.349 <sup>+</sup>	.204	.277	.322 <sup>+</sup>	1
	Sig. (2-tailed)	.537	.818	.577	.594	.077	.026	.694	.522	.116	.024	.196	.076	.037	

Table 9: Correlation matrix

### 4.4.3. Most important green service offerings

The respondents had the opportunity to choose between eight green service offerings which were identified in the literature. It was possible for the respondents to select more than one option if they felt it was necessary. The retailers could then rank them by degree of importance (4 being the highest degree) and the average of the votes has been calculated. The data shows that three green service offerings were selected by most of the retailers. These include ISO certification, actual emission calculation and more efficient packaging solutions (chart 14). The standard deviation also highlights that a lot of retailers did not completely agree with the ranking of the degree of importance as long as it is quite high for most of the services.

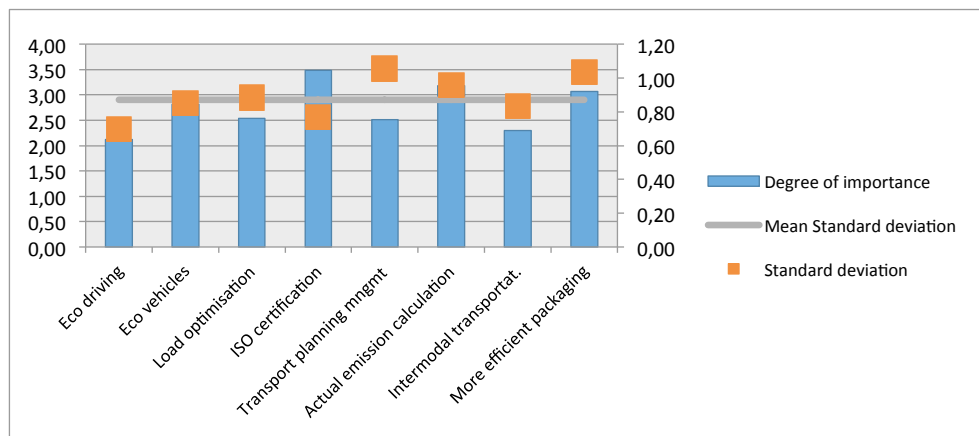


Chart 14: Most important green service offerings (combined responses)

The French retailers seem to agree with the previous results found except for the more efficient packaging solution which is lower than eco vehicles (chart 15). The standard deviation for ISO certification is the lowest one out of all the others showing that most of the respondents agreed with this ranking.

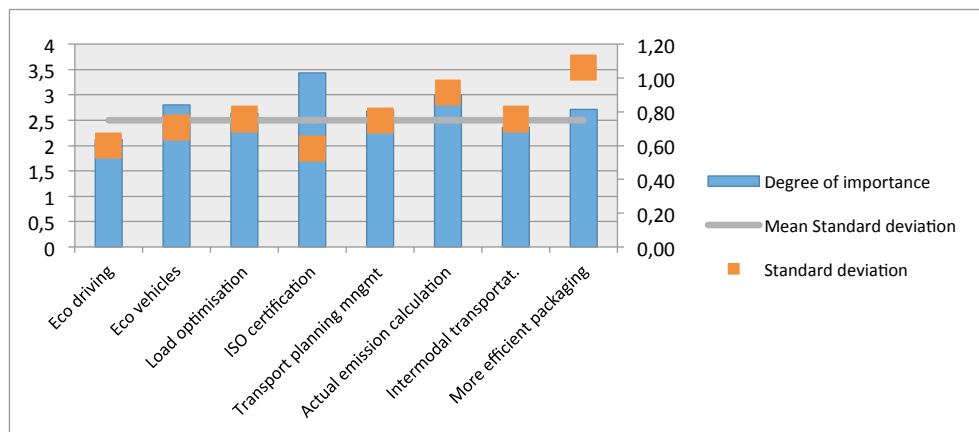


Chart 15: Most important green service offerings (French responses)



The Swedish retailers in their case clearly highlighted ISO certification, actual emission calculation and more efficient packaging solutions as being very important services that should be offered by a transport operator. Those three services scored around 3.5 when most of the others are below 2.5 (chart 16).

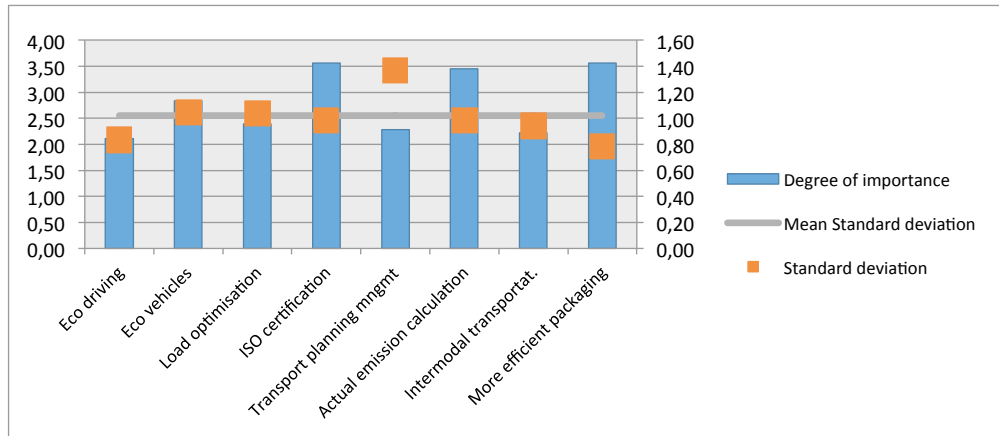


Chart 16: Most important green service offerings (Swedish responses)

#### 4.4.4. Is CSR playing a role when selecting a transport operator?

For the retailers willing to use green service offerings it was then asked if corporate social responsibility or company’s objective play a role when selecting a transport operator. The results shown in chart 17 clearly indicate that for 72% of the respondents it does.

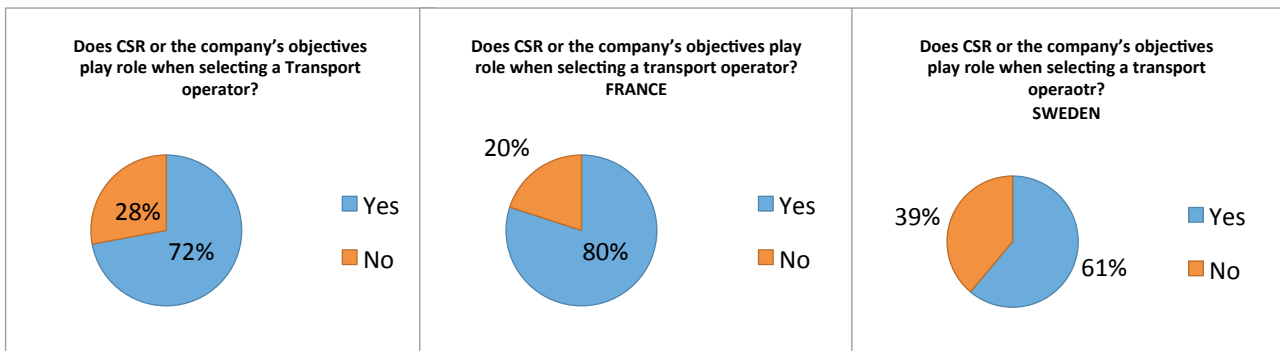


Chart 17: role of CSR when selecting a transport operator

When comparing the two countries the difference is not so easy to spot. French retailers willing to use green service offerings are clearly affected by CSR or company’s objective when selecting a transport operator because 80% of them said “yes”. For Swedish retailers the impact is less important with 61% of the respondents answering “yes”.

#### 4.4.5. Willingness to pay extra for green service offerings

The respondents who were motivated to use green service offerings were asked if they would be willing to pay extra for them. Chart 18 shows a pie chart first of the combined of the retailers' willingness to pay extra in order to use green service offerings. Next, the responses from the French retailers are shown and finally those from the Swedish retailers.

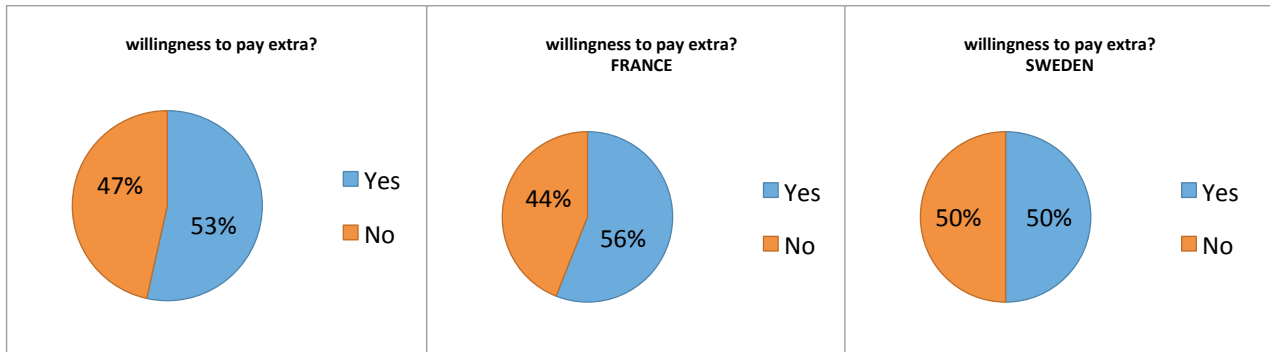


Chart 18: Willingness to pay extra for green service offerings

It is noticeable that Swedish retailers are clearly divided on this question with the French retailers being more willing to pay extra in order to use green service offerings.

The respondents also had to indicate that if they were willing to pay extra for green service offerings, by how much more they would be prepared to pay in order to use those services. They had to choose between different percentages from 0-2.5% to 7.5-10% (chart 19).

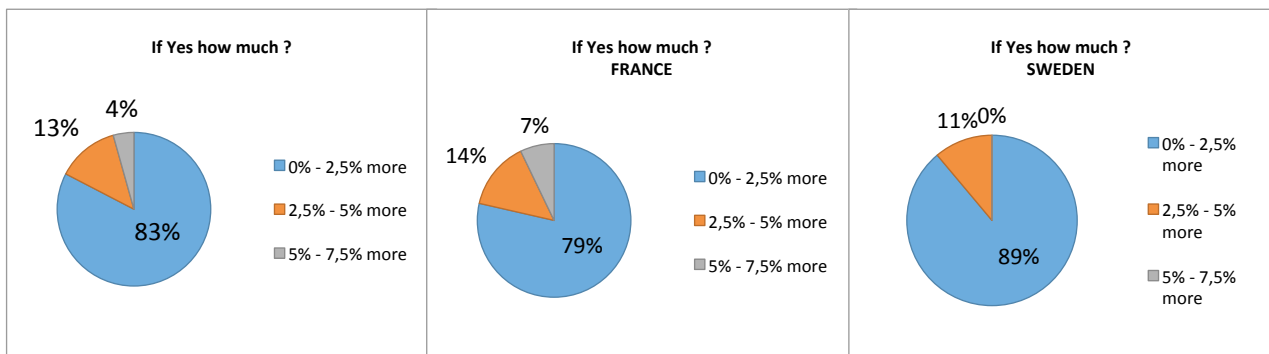


Chart 19: Amount extra the respondents would be prepared to pay for green service offerings

The results clearly show that most of the respondents are willing to pay extra between 0 to 2.5% more than they are actually paying. The Swedish and French retailers agreed on this criterion.

## 4.5. Empirical model

The model shown in figure 10 is a visual representation of the key findings collected from the empirical data. This model follows the path and structure of the questionnaire and this is symbolized by the blue arrows. The same structure has been used when writing the empirical data chapter. The French and Swedish retailers have identified different motivations to use green service offerings and different reasons for being unwilling to use those services. Those findings are exposed in the boxes above the French and Swedish retailer's box. The retailers who were willing to use green service offerings are represented on the left of the model. The services are displayed with the level of importance. The level of importance of the service offerings is represented by plusses (+), two of them meaning that the service has been seen as very important. On the right of the model the retailers willing to use green service offerings are displayed. The green services are displayed with the level of importance. The level of importance of the green service offerings is also indicated by plusses (+), two of them meaning that the service has been seen as very important. Then the retailers were asked if they are willing to pay extra for those services. For those that would pay extra for green service offerings indicated the extra amount as a percentage of their yearly transport operator costs.

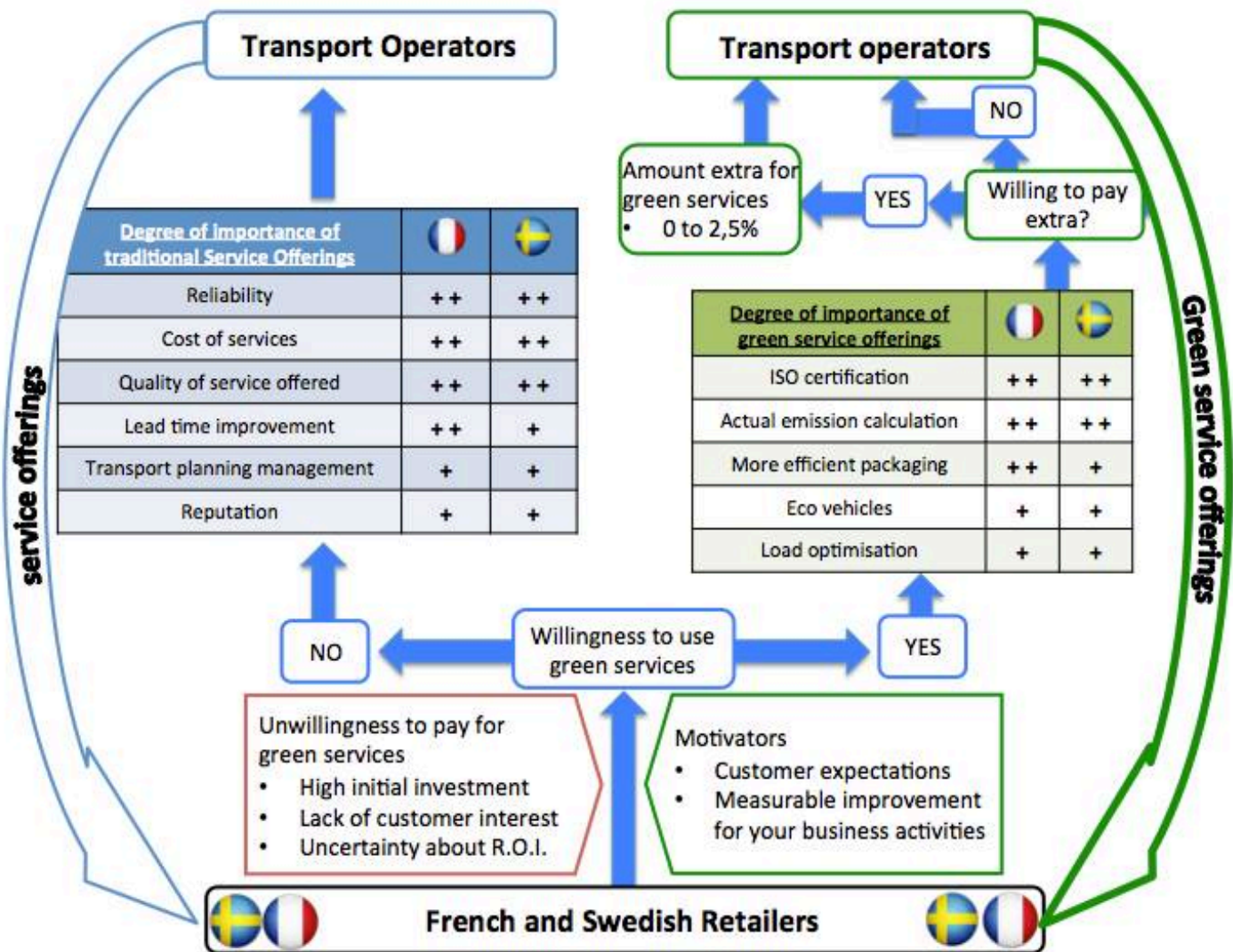


Figure 10: Model to summarise the empirical data

## **5. Analysis and discussion**

*This chapter focusses on analysing the empirical data in relation to the theory discussed and identified in the theoretical framework. The analysis will be structured in such a way that for each research question the theory and empirical findings will be linked to identify and explain any trends or relations. Additionally, in each section of the analysis, the author will provide his own contribution.*

### **5.1. Sub research question 1: Are the retailers willing to use green service offerings and why?**

There are different motivators that could encourage French and Swedish retailers to use green service offerings from transport operators. Retailers who are seen as being environmentally conscious could expand their customer base by attracting consumers who are concerned about the impact business activities might be having on the environment (Murphy & Poist, 2003). According to Chkanikova et al. (2013), various drivers can influence French and Swedish retailers into engaging into more environmentally friendly practices. Expectations of customers can influence and increase a retailer's motivation to use green services, since their level of influence is high (Martinsen, 2014).

It is then interesting to notice that the two motivators that could encourage all the respondents to adopt green service offerings from transport operators are customer expectations and measurable improvement of their business activities. As mentioned previously in the empirical data the lack of customer interest could be one of the barriers to using green supply chain management and it is interesting to notice that the influence of the customers is also present as a motivator. This could be due to the reason that customers are largely seen as the main influences to encourage French and Swedish retailers to use green service offerings (Nordas, 2008). In the opinion of the author, this could be due to the fact that the highest level of influence as previously mentioned in the theoretical framework Martinsen (2014) is starting with the customers and going back up the supply chain. The author also thinks that the retailers tend to be more and more aware of the importance of satisfying customer expectations in an increasingly competitive market. The French and Swedish markets, as seen in the empirical data, seem to face a high level of competition from within and outside their countries.

The second main reason selected by most of the respondents from both countries was the measurable improvements for their business activities. As mentioned by Martinsen (2014) implementing green service offerings can ultimately enhance the business performances of the organizations. It appears that the French and Swedish retailers could be motivated by the increase of their business activities even if as mentioned also in the literature using green service offerings could increase their costs (Isaksson K, 2012). The author believes that the retailers are aware of the environmental concerns and also about customers concern about this regard. In order to please the customers and meet their expectations, retailers could be willing to implement those services and ultimately attract more customers. Also some green services such as reverse logistics have proven that it is possible to lower the expenses and the carbon footprint resulting in a reduction of the costs in a long term vision.

The Swedish retailers have selected another reason that could encourage them to use green service offerings that French retailers did not all mentioned. Economic incentives could motivate Swedish retailers to use green service offerings from a transport operator in order to try new services which they would not have considered before due to financial concerns. These economic incentives may eventually improve the business activities of a retailer. Nordas (2008) mentioned that customers are largely seen as the main motivator to encourage retailers to use green services. This corresponds to Martinsen's (2014) findings which have been visualised in figure 1. Economic incentives could include tax breaks or grants for organisations that could be set by the government (Darnall, Jolley, & Handfield, R.2008). Moreover it is then interesting to see that government regulation was after economic incentives the last one to be designed as a motivator by the Swedish retailers. On the opposite, French retailers have classified this motivator as the third most important one. In the opinion of the author, this could be due to the fact that the government is looking for ways to make its economy greener and encourage organisations to adapt to a green way of conducting business. The Swedish market as mentioned previously by Allianz & WWF (2009) is already one of the leader in term of environmentally friendly ways to conduct business activities. Government deregulation could help to reduce barriers to entry and ease the uptake of green services by increasing competition and through that improve efficiency and innovation (Lai, Cheng, & Tang, 2010).

As previously explained, several reasons can explain why customers would be willing to use green service offerings. However some reasons show that Swedish retailers could also be

unwilling to use green service offerings. Srivastava, 2007, mentioned that organizations are facing financial and customer related issues when attempting to adapt green policies. This appears to be true for the retailers who were unwilling to pay more for green service offerings and they suggested reasons as to why. These include *high initial investment*, *lack of customer interest* and *uncertainty about the return on investment*. The retailers from France and Sweden completely agreed on the same reasons that could prevent them from using green service offerings.

The literature suggested that a *high initial investment* on behalf of the transport operator could result in high costs (Chkanikova & Mont, 2015) which might be passed on to the French and Swedish retailers and ultimately push up their costs. Therefore, this could be a reason why some French and Swedish retailers who are unable to increase the price of their products would reject green service offerings of a transport operator. *Lack of customer interest* was also put forward as a reason which French and Swedish retailers may not be prepared to use green service offerings (Ramanathan, Bentley, & Pang, 2014). As identified in the empirical data, lack of customer interest or support seems to have an important role in the decision making of the retailers. Customers of the retailers may have a lack of interest in environmental concerns which could dissuade retailers from engaging with a transport operators with green service offerings. According to Gunn & Mont (2014), it seems to be possible to assume the fact that French and Swedish retailers could have difficulties in recovering the additionnal costs associated with using a transport operator who provides green service offerings and this ultimately explain why retailers have identified *uncertainty about the return on investment* as one of the main barriers. The investments related to use and provide green service offerings could increase the cost of the service provided. The extra costs that arise might affect the retailers' customer (Chkanikova & Mont, 2015). In the opinion of the author, the financial perspective is obviously the main barrier when using green service offerings. This can be confirmed when looking at the fact that French and Swedish retailers mentioned measurable improvement of their business activities as being a strong motivator. The retailers may not be willing to invest in green service offerings if they can invest in other fields on which they can quantify the return on investment or benefits. The green service offerings may be perceived nowadays as a secondary tool to use in order to attract customers or improve the business performances.

Through the motivators and barriers, it is interesting to mention that on two different markets, most of the retailers agreed on the ranking of the different criteria. This can highlight the fact that these concerns can be proper to the European market or to this sector of activity. The financial perspective is ultimately also linked to the customer perspective as long as most of the retailers are attracting customers into their point of sales through communication. A lack of customer interest or on the opposite a support from customers can influence a lot the decision from the retailers to consider or not using green service offerings and investing in it.

Therefore, the respondents were asked if they would be willing to pay extra for green service offerings. The French and Swedish retailers who were not willing to pay extra for green service offerings were almost as many as those willing to pay. Therefore, 83% of those who mentioned that they were willing to pay have indicated that it will be only if the extra costs are between 0 to 2.5% more on top of their current expenditure on transport. This criterion shows that the financial perspective is definitely the main concern for the retailers especially when thinking that they are operating in a fierce market on which the end price is the main argument. The others were not willing to pay extra in order to avoid any extra cost and lose any competitive advantage against their competitors.

## **5.2. Sub research question 2: Which of the green service offerings are important for French and Swedish retailers in their selection of transport operators?**

The empirical data have allowed the author to identify which, according to the French and Swedish retailers, green service offerings are important. It is noticeable that some green service offerings have been more solicited than others and that there are some differences between the French retailers and the Swedish ones. The most selected green service offerings are actual emission calculation and environment certification (ISO). These results can be observed, for French and Swedish retailers, when looking at the results provided by the respondents who ranked the degree of importance of green service offerings that should be offered by transport operators. This may be explained by the fact that customers and ultimately retailers are increasingly more concerned about the environment (McKinnon, 2010).



Elhedhli & Merrick (2012) explained that actual emission calculation refers to the set of actions taken by an organisation to show that they reduce the impact their activities have on the environment, such as transport activities. The author believe that this is due to the fact that actual emission calculation is a relatively simple tool that can be used by retailers to promote the fact that they are conducting their business in an environmentally friendly manner. It could also be due to the fact that norms and regulations may have increase the willingness of companies to decrease the impact of their activities on the environment.

The author Yu, Elinger, & Haozhe (2010) have underlined the possible benefits for companies in extending their reach to a new portfolio of customers who are environmentally aware. Thanks to environmental certification such as the ISO 14001 standards, a transport operator can provide evidence of its environmental credentials (Byrne et al., 2013) and then ultimately the retailers could take advantage of this. It seems like the respondents are aware of this because the statistics show that environmental certification has been selected with a score of 3.5/4 by the French and Swedish retailers. This implies that this service can be labelled as very important. Thus, the standard deviation confirms that most of the respondents agreed on the degree of this service. Moreover, for both countries, the standard deviation is below the average standard deviation and close to zero highlighting the fact that most of the respondents agreed. According to the author this could be due to the fact that more and more retailers are aware of this certification and can use it to promote their green requirements. This could also be related to the fact that customers know more about these standards than before. Another explanation can be the fact that as long as the retailers have to operate in a competitive environment, being able to differentiate themselves from competitors is a competitive advantage.

The similarities between the French and Swedish retailers stop there because for the other green service offerings, they disagreed. For Swedish retailers there is another very important green service offering which is the one proposing more efficient packaging solutions. This service appears to be desirable to the respondents. The mean ranking of the Swedish respondents for this service is also 3,5/4 combined with a standard deviation below the mean standard deviation. More efficient packaging solutions could reduce the amount of space in a transport vehicle needed to transport products (Carter, Kale, & Grimm, 2000). Moreover, the amount of journeys made could possibly be decreased. The author therefore believes this

could lead to reduced costs for retailers as well as carbon emission reductions due to fewer journeys.

The French retailers have selected another green service offering as being the third most important. This service is eco vehicles. As mentioned by Wolf and Seuring 2010, several solutions related to vehicles exist in order to reduce the impact of company activities on the environment. Thanks to more environmentally friendly fleets of vehicles, companies may be able to lower their negative impact on the environment. They may also be to openly communicate on the actions they conduct to operate their business activities and better respect the environment. Also, the main reason why eco vehicles seems to be so desirable for French retailers may be because it is a physical service that can be seen, not only by the retailers, but also by their customers (Isaksson, 2012). The solutions related to vehicles could consist of the use of alternative fuels, more efficient engines or adjustments to vehicles. Eco vehicles have been clearly identified as a green service offering by the French respondents of the questionnaire. The author assumes that this could be due to the fact that environmentally friendly vehicles are becoming more and more available. This may help customers to become more aware of the impact of the transportation of goods and then be more receptive to retailers using this green service offering. Then comes in fourth place more efficient packaging solutions for French retailers when Swedish retailers put eco vehicles in fourth position.

For French and Swedish retailers, load optimisation is the fifth most important green service offering. This is interesting when considering the fact that this service could be complementary to the more efficient packaging solutions. Finally according to French and Swedish retailers, eco driving was seen as the least important green service offering even if they ranked eco vehicles as quite important.

### **5.3. Research question: Which service offerings are important for French and Swedish retailers in their selection of transport operators?**

In order to reply to this question, the French and Swedish respondent had the possibility to rank the traditional service offerings in term of importance and then do the same ranking but including the traditional service offerings and the green service offerings.

The empirical research findings show that traditional service offerings seem to be ranked the same way by French and Swedish retailers when looking at the three most important. Those traditional service offerings are cost of services, quality of service offered, reliability. The author believes these service offerings are all closely related to cost and service. This corresponds with Chen & Wu (2011) who explained that cost and service have traditionally been closely related to retailer's selection when looking for transport operators.

Hinterhuber & Friedrich (2002) found that the retailers will attempt to find the most cost effective method to transport their goods. They continue by explaining that retailers look for a high value service provided at the lowest cost possible. When making a decision on the selection of transport operators Cakir et al. (2009) suggest that cost of services plays a role. It appears that the respondent have indicated that they are in agreement with the authors from the literature. French and Swedish retailers ranked cost of services at the highest level of importance. This is backed up by the standard deviation being the closest one to zero. The author assumes that due to the competitiveness of the French and Swedish market, cost will always be one of the most considerations for a retailer. Therefore it may be realistic to assume that retailers could look for the most competitive offer when considering their choice of transport operator.

It was suggested by Lynch (2000) that not only is the quality of the services provided by transport operators is important for their customers, but also being able to fulfil their expectations. The respondents appear to have answered in agreement with this statement. It can be seen that the mean average ranking is 3.5 for French retailers and 4 for Swedish retailers out of a possible maximum of 4. This signals that the majority of the French and Swedish retailers who responded, rate quality of service as a very important service offering. In the opinion of the author, this could be due to the competitive nature of the transport operator industry which could make the quality of services provided important when satisfying a customer's needs. Furthermore, it could be fairly easy for a retailer to replace a transport operator if the quality of their services is low.

Reliability was described by Lynch (2000) as being a service offering that is able to increase both customer satisfaction and retention. Lai (2004) further elaborates on this by suggesting that consistency helps a customer to feel confident in the service of a transport operator. The

data collected from the French and Swedish retailers who responded to the questionnaire seem to confirm this with on average a score of 3.7 out of 4. This response resulted in a standard deviation which was the lowest one for the two combined markets, implying that the respondents felt the same way as each other. This could possibly be related to the expectations of retailers' customers who may choose to use the service of a competitor if the products they demand are not available as and when they require them. Additionally, in France and Sweden, retailers are fairly common and price their goods at a similar rate. This could result in their customers purchasing goods from a competitor if they cannot find the goods they want.

Additionally, the Swedish retailers have not identified any other service as very important but the French retailers ranked lead time improvement as also being important. This could be explained because of the fact that French retailers want to be flexible and require their products to be delivered as quickly as possible once an order is placed (Kabir, 2012). The empirical data confirms this with a high mean and a standard deviation below the average standard deviation, which seems to indicate that the French retailers predominantly see that service as a desirable service offering. The author believes that this can be due to the nature of the industry of keeping the customers satisfied.

When looking at the ranking of the green service offerings against the traditional service offerings, various observations can be done. To recapitulate, in the opinion of French and Swedish retailers, actual emission calculation and environmental certification best represent green service offerings. Environmental certifications, such as ISO 14001, may be very important for French and Swedish retailers because it provides transparency in the processes in which the products have been through, throughout the supply chain (Byrne, Ryan, & Heavey, 2013). Moreover it confirms that the transport operator is following certain specific environmental laws and requirements. Environmental certifications can provide assurance to the French and Swedish retailers that the transport operator is measuring and trying to reduce their environmental impact. Actual emission calculation was deemed to be one of the green services that the French and Swedish retailers who responded to the questionnaire felt was important. The author believes this could be related to the fact that in order for Swedish retailers to be able to measure their carbon footprint they need to calculate the actual amount of emissions their activities are producing. The author believes that this could be due to French and Swedish retailers wanting to be seen to be actively reducing the impact their

activities have on the environment, especially in the opinion of their customers. The customers are again the most important part of the equation for French and Swedish retailers when identifying green service offerings.

The French and Swedish retailers had the opportunity to pick between traditional and green service offerings in order to identify which service offerings were important when selecting a transport operator. This showed that it seems that French and Swedish retailers put more emphasis on traditional service offerings rather than green service offerings. An interesting finding comes from this confrontation, the French and Swedish retailers completely agreed on the four most important services. Four traditional service offerings which are quality of service offered, reliability, cost of services and surprisingly reputation. For the three first mentioned the standard deviation are the closest to zero for the two countries and only the reputation one does not look like it is attracting all the respondents. The only distinction between France and Sweden is on the fact that the French retailers selected another service offering as being important; environment certification. Swedish retailers did not rank this service as important. The author believe that the traditional service offerings are still perceived as being the most important when selecting a transport operator because of the guaranties provided by these services. When selecting a transport operator it seems to be the most important services when conducting a business activity.

## **6. Conclusion**

*In the concluding chapter, the research question will be answered. Furthermore, suggestions for future research in this specific field will be presented. Finally, the author will give his reflection on writing the thesis.*

It was identified in the literature that in the past the main focus on selecting transport operators was predominantly on cost and quality optimisation. They consisted largely of traditional service offerings. The findings of the paper showed that this is still the case for the French and Swedish retailers who responded to the questionnaire. They identified cost of services, quality of service offered, reputation and reliability as being the most important.

It appeared that traditional service offerings were mostly seen as being more important than green services offerings. Three reasons that could explain why traditional service offerings seem to be more important were identified as being, high initial investment, uncertainty about return on investment and lack of customer interest. Conversely, two motivators were discovered which might encourage a French and Swedish retailers to pay extra for green service offerings. These were customer expectations and measurable improvements to business activities.

The study also aimed to identify important green service offerings. The results of the questionnaire determined that the most identifiable green service offerings are actual carbon emission calculation, more efficient packaging solutions and then environment certification. Interestingly, the author noticed that two of the identified green service offerings appeared to be related to carbon emissions and tools easy to use in order to communicate about. It was thought that this might be due to the reason that carbon emissions are a topic that is well known to consumers.

Another area that was explored was the willingness for French and Swedish retailers to pay extra for green service offerings. It was discovered that some of the respondents are willing to pay extra for green services and most notably those who operate in the fast moving consumer goods industry such as supermarkets and convenience stores. Most of the respondents from France and Sweden who said they would be willing to pay extra for green services also indicated that they would be willing to pay between 0 to 2.5% more on top of their current expenditure on transport.

On a final note, the research appears to show that for some green service offering, there is not a vast gap between traditional and green service offerings when it comes to the degree of importance. It was noticed however, that one green service offering seemed to be important when selecting transport operators for French retailers. This green service offering is environment certification and an interesting observation has been made. It seemed that the French retailers do associate this green service offering as an important tool to integrate to their business and ultimately communicate about, especially in France where it is possible to see some communication about it.

## **6.1. Societal and/or Sustainability aspects**

Retailers have an influential role in the supply chain and are usually the ones to drive innovation in the chain. Furthermore, the transport industry has a major impact on the environment and therefore indirectly on the society as well. Nowadays, companies are trying to reduce the carbon footprint of their business activities. Some organisations are driven to do this by external stakeholders such as, customers and shareholders. Retailers may be able to reduce their carbon footprint by utilising greener services, especially in their transport operations. However, this is a difficult aspect to measure at the moment. It would be interesting to conduct this research in the future and to see if then the green service offerings have become more important and if this has helped to reduce the carbon footprint.

## **6.2. Suggestions for further research**

For further research suggestions, it would be relevant to have a larger population sample to expand the respondent pool. More extensive empirical research would increase the validity of the paper. Furthermore, other areas of interest to explore could be to focus on a different perspective such as manufacturers or wholesalers. Moreover, it is noticeable that French and Swedish retailers appear to find green service offerings interesting but at this time not as important as traditional service offerings. Therefore it would be interesting to find out if the results of this study would be different in a future study. Additionally, it could be interesting to benchmark the results against different countries.

## **6.3. Reflections**

When reflecting upon this thesis, the author believes a higher a response rate from French and Swedish retailers would have improved the reliability of the findings of this paper. This could have been achieved by contacting more respondents. Additional follow ups could also have resulted in extra responses and ultimately a stronger foundation upon which to draw conclusions. It is worth noting that although the findings from this thesis present an indication of the beliefs of French and Swedish retailers, no decisive inferences can be taken due to the limited pool of responses.

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## Appendix

*All relevant documents and models created by the author that have not been included in the main thesis document can be found in the appendix.*

### Questionnaire introduction letter

#### **Importance of Green Service Offerings When Selecting a Transport Operator**

We are conducting a questionnaire as part of our Master degree in Business Process and Supply Chain Management at Linnaeus University in Växjö. You have been selected because our focus is on the selection of transport operators from the perspective of Swedish retailers. The survey aims to determine the importance of green service offerings when selecting a transport operator. It is vital for our research that we receive a variety of replies from Swedish retailers that operate in different sectors.

We would appreciate if you would be willing to spend a few minutes of your valuable time completing the questionnaire. It should not take more than five minutes. The responses that we receive will be completely anonymous and confidential. All the participants of the questionnaire will not be identified by organization, but instead by sector of activity. Additionally, data from all respondents will be compiled and analysed as a group.

Thank you very much for taking the time to complete the questionnaire.

If you have any questions, please feel free to contact us on the following email or telephone number:

Email: [db222gg@student.lnu.se](mailto:db222gg@student.lnu.se)

Phone: 0725 407 955

With Kind Regards

Paul-Alban Montanie



## Questionnaire (English)

### Importance of Green Service Offerings When Selecting a Transport Operator

#### Company profile (Section 1)

**1. Please, indicate the number of employees within your company**

- 1 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 60
- 61 – 99
- 100 or more

**2. Please indicate which sector of activity best represents your area of retail**

- Pharmacy
- Cosmetics
- Games and toys
- Supermarkets
- Beverages
- Fashion
- Automotive
- Electronics
- House and garden furniture
- Sports and outdoor goods
- Convenience stores
- Other

#### Willingness to use GSO (Section 2)

**3. Would you be willing to use GSO of a transport operator? (Even if this increases your transport operation expenses)**

- Yes (Skip to section 4)
- No (Proceed to section 3 and section 4 can be skipped)

Not willing to use GSO (section 3)

**4. Please indicate which of the following prevents you from using GSO of a transport operator?**

	1	2	3	4	5
High initial investments					
Uncertainty about the return on investment					
Lack of customer interest / support					
Lack of economic incentives					
Unclear regulations					

**5. Please indicate in your opinion the most important criteria when selecting a transport operator?**

Note: The main task of transport operators is to handle the transport from one location to another. The services that transport operators provide are always related to the transportation of goods and can include the handling of documents, scheduling, inbound and outbound transportation. A transport operator can be an airline, shipping line, railway or road operator.

	Very important	Important	Not important	Not that necessary
Transport planning management				
Cost of services				
Lead time improvement				
Quality of service offered				
Reliability				
Reputation				

**6. Does CSR or the company's objectives play a role when selecting a transport operator?**

- Yes
- No

## Willing to use GSO (section 4)

### 7. Which of the following would encourage you to use a green transport operator?

Note: More than one option can be selected

- Government deregulation (Easier implementation)
- Economic incentives (Tax breaks, Grants)
- Customer expectations
- Stakeholder expectations
- Measurable improvement for your business activities
- Brand reputation

### 8. Please indicate in your opinion the most important criteria when selecting a transport operator?

Note: The main task of transport operators is to handle the transport from one location to another. The services that transport operators provide are always related to the transportation of goods and can include the handling of documents, scheduling, inbound and outbound transportation. A transport operator can be an airline, shipping line, railway or road operator.

	Very important	Important	Not important	Not that necessary
Transport planning management				
Cost of services				
Eco driving				
Lead time improvement				
Actual emission calculation				
Eco vehicles				
Quality of service offered				
More efficient packaging solutions				
Reliability				
Carbon emission reduction				
Reputation				
Load optimisation				
ISO Certification				
Intermodal transportation				

**9. Please indicate according to you the most important green services that should be offered by a transport operator**

	Very important	Important	Not important	Not that necessary
Eco driving				
Eco vehicles				
Load optimisation				
ISO certification				
Transport planning management				
Actual emission calculation				
Intermodal transportation				
More efficient packaging solutions				
Carbon emission reduction				

**10. Does CSR or the company's objectives play a role when selecting a transport operator?**

- Yes
- No

**11. If there would be an increase in your costs, would you be willing to pay more to provide green service offerings?**

- No (Skip the next question)
- Yes

**12. If Yes how much?**

Note: as a percentage increase on top of transport operators spending on a yearly basis.

- 0% - 2,5% more
- 2,5% - 5% more
- 5% - 7,5% more
- 7,5% - 10% more
- 10% - 15% more
- 15% and more

## Questionnaire (French)

L'importance de l'offre des services écologiques dit « vert » durant le processus de sélection d'un transporteur.

### Le profil de l'entreprise (Section numéro 1)

1. S'il vous plaît, veuillez indiquer le nombre d'employé(e)s au sein de votre entreprise

- 1 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 60
- 61 – 99
- 100 et plus

2. S'il vous plaît, veuillez indiquer quel secteur d'activité représente le mieux votre type de commerce

- Pharmacie
- Cosmétique
- Jouets et jeux
- Supermarchés
- Boissons et vente d'alcool
- Mode
- Concessionnaire automobile
- Electronique
- Produits pour la maison ou le jardin
- Sports et équipements de loisirs
- Commerce de proximité
- Autre

### Désir d'utiliser des services écologiques dits « vert » (Section numéro 2)

3. Seriez prêt à utiliser des services écologiques dit "vert" d'un transporteur ? (Même si cela résulte en une hausse de vos coûts de transport)

- Oui (Passez directement à la partie 4)
- Non (Poursuivez directement à la section 3 et omettez la section 4)

Non désireux d'utiliser des services écologiques dits « vert » (Section numéro 3)

**4. S'il vous plaît, veuillez indiquer lesquels de ces raisons vous freineront dans l'envie d'utiliser des services écologiques dits « vert » d'un transporteur?**

	1	2	3	4	5
Investissement initial élevé					
Retour sur investissement incertain					
Manque d'intérêt de la part des clients					
Manque d'incitation économique					
Réglementations pas assez claires					

**5. S'il vous plaît, veuillez indiquer selon vous les critères les plus importants quand vous sélectionnez un transporteur?**

NB: La principale tâche d'un transporteur est de prendre en charge le transport de vos produits d'un point A à un point B. Les services offerts par un transporteur sont toujours liés au transport de biens et marchandises et peuvent inclure la gestion des documents relatifs à ce transport, la planification, les flux de transport entrant et sortant. Un transporteur peut être une compagnie aérienne, de fret par bateau, de train ou de camions.

	Très important	Important	Pas important	Pas nécessaire
Gestion de la planification des transports				
Coûts des services				
Amélioration du délai de mise en œuvre				
Qualité du service offert				
Fiabilité				
Réputation				

**6. Est-ce que la responsabilité sociétale de votre entreprise (RSE) ou les objectifs de votre entreprise jouent un rôle quand vous sélectionnez un transporteur?**

- Oui
- Non

## Désireux d'utiliser des services écologiques dits « vert » (Section numéro 4)

### 7. Lesquelles de ces propositions vous incitez à utiliser un transporteur labellé "vert"?

NB: Plus d'une réponse peut être sélectionnée

- la dérégulation du marché par le gouvernement (implémentation plus facile)
- incitations économiques (réduction de taxes, subventions)
- les attentes de vos clients
- les attentes de vos parties prenantes (actionnaires, collectivités locales...)
- des améliorations mesurables de vos performances économiques
- l'image de marque

### 8. S'il vous plaît, veuillez indiquer selon vous les critères les plus importants quand vous sélectionnez un transporteur?

NB: La principale tâche d'un transporteur est de prendre en charge le transport de vos produits d'un point A à un point B. Les services offerts par un transporteur sont toujours liés au transport de biens et marchandises et peuvent inclure la gestion des documents relatifs à ce transport, la planification, les flux de transport entrant et sortant. Un transporteur peut être une compagnie aérienne, de fret par bateau, de train ou de camions.

	Très important	Important	Pas important	Pas nécessaire
Gestion de la planification des transports				
Coûts des services				
Conduite écologique				
Amélioration du délai de mise en œuvre				
Calcul des émissions de carbone				
Véhicules écologiques				
Qualité du service offert				
Solutions de packaging plus efficaces				
Fiabilité				
Réduction des émissions de carbone				
Réputation				
Optimisation des chargements				
Normes ISO				
Transport multi modal				

**9. S'il vous plaît, veuillez indiquer selon vous les services écologiques dit « verts » qui devraient être proposé par un transporteur**

	Très important	Important	Pas important	Pas nécessaire
Conduite écologique				
Véhicules écologiques				
Optimisation des chargements				
Normes ISO				
Gestion de la planification des transports				
Calcul des émissions de carbone				
Transport multi modal				
Solutions de packaging plus efficaces				
Réduction des émissions de carbone				

**10. Est-ce que la responsabilité sociétale de votre entreprise (RSE) ou les objectifs de votre entreprise jouent un rôle quand vous sélectionnez un transporteur?**

- Oui
- Non

**11. Si il y avait une augmentation dans vos coûts de transport, seriez enclin à payer pour des services écologiques dit « verts »?**

- Non (Ne répondez pas à la prochaine question)
- Oui

**12. Si oui combien?**

NB: en plus de vos coûts annuels pour la logistique de vos marchandises et biens

- 0% - 2,5% plus
- 2,5% - 5% plus
- 5% - 7,5% plus
- 7,5% - 10% plus
- 10% - 15% plus
- 15% et plus



# Frågeformulär (Questionnaire – Swedish)

Hur viktiga är miljövänliga alternativ vid val av transportoperatör

## Företagsprofil (Del 1)

**1. Hur många anställda har ditt företag?**

- 1 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 60
- 61 – 99
- 100 eller fler

**2. Vilket av nedanstående alternativ överensstämmer bäst med ert företags inriktning**

- Läkemedel
- Kosmetika
- Spel och leksaker
- Dagligvaruhandel
- Drycker
- Mode
- Fordon
- Elektronik
- Möbler
- Sport och friluftsvvaror
- Närbutiker
- Annat

## Inställning till att använda miljövänliga transportalternativ (Del 2)

**3. Skulle ni kunna tänka er att välja miljövänliga transportalternativ från er transportoperatör? (Även om detta höjer era transportkostnader)**

- Ja (Fortsätt direkt till del 4)
- Nej (Fortsätt till del 3. Du kan sedan hoppa över del 4)

### Om ni svarat nej på fråga 3, fortsätt här. (del 3)

4. Nedan följer en rad påståenden. Var vänlig uppskatta hur mycket de bidrar till att hindra er från att använda miljövänliga transportalternativ.

	1	2	3	4	5
Höga initiala investeringskostnader					
Osäkerhet kring investeringens lönsamhet					
Saknas stöd och intresse från kund					
Brist på ekonomiska incitament					
Otydliga regelverk					

5. Var vänlig uppskatta hur viktiga följande kriterier är för ert val av transportoperatör.

Observera: Huvuduppgiften för transportoperatörer är att hantera transporten från en punkt till en annan. Tjänsten som transportoperatörer tillhandahåller är alltid relaterad till transport av varor och kan omfatta dokumenthantering, transportplanering samt hantering av in- och utgående transporter. En transportoperatör kan vara ett flygbolag, rederi, godståg eller åkeri.

	Väldigt viktigt	Viktigt	Mindre viktigt	Inte viktigt alls
Operatörens logistiska prestanda				
Tjänsternas kostnader				
Förbättrade ledtider				
Tjänsternas kvalitet				
Operatörens pålitlighet				
Operatörens anseende				

6. Påverkar företagets samhällsansvar (CSR) eller företagsmålen valet av transportoperatör?

- Ja
- Nej

## Om ni svarat Ja på fråga 3, fortsätt här. (del 4)

### 7. Vilka av följande alternativ skulle kunna motivera er att använda en transportoperatörs miljövänliga transportalternativ?

Observera: Ni kan välja att markera fler än ett alternativ

- Statlig avreglering (Enklare implementering)
- Ekonomiska incitament (Skatteavdrag eller bidrag)
- Kundernas förväntningar/krav
- Aktieägarnas förväntningar/krav
- Mätbara förbättringar för företagsverksamheten
- Verksamhetens anseende

### 8. Var vänlig uppskatta hur viktiga följande kriterier är för ert val av transportoperatör.

Observera: Huvuduppgiften för transportoperatörer är att hantera transporten från en punkt till en annan. Tjänsten som transportoperatörer tillhandahåller är alltid relaterad till transport av varor och kan omfatta dokumenthantering, transportplanering samt hantering av in- och utgående transporter. En transportoperatör kan vara ett flygbolag, rederi, godståg eller åkeri.

	Väldigt viktigt	Viktigt	Mindre viktigt	Inte viktigt alls
Operatörens logistiska prestanda				
Tjänsternas kostnad				
Eco driving				
Förbättrade ledtider				
Beräkningar av Co2-utsläpp				
Eco-fordon				
Tjänstens kvalitet				
Effektivare packeteringslösningar				
Operatörens pålitlighet				
Minskning av Co2-utsläpp				
Operatörens anseende				
Optimering av last				
ISO Certifiering				
Intermodal transport				

**9. Var vänlig uppskatta vad som enligt er är det viktigaste miljövänliga alternativet som transportoperatörer bör erbjuda.**

	Väldigt viktigt	Viktigt	Mindre viktigt	Inte viktigt alls
Eco driving				
Eco-fordon				
Optimering av last				
ISO certifiering				
Operatörens logistiska prestanda				
Beräkningar av Co2-utsläpp				
Intermodal transport				
Effektivare packeteringslösningar				
Minskning av Co2-utsläpp				

**10. Påverkar företagets samhällsansvar (CSR) eller företagsmålen valet av transportoperatör?**

- Ja
- Nej

**11. Även om det skulle innebära en ökning av era omkostnader, skulle ni vara villiga att betala mer för att kunna erbjuda miljövänliga alternativ till era kunder?**

- Nej (Hoppa över fråga 12)
- Ja

**12. Om ja, hur mycket?**

Observera: ange svar i procentuell ökning av företagets årliga kostnad för transporttjänster.

- 0% - 2,5%
- 2,5% - 5%
- 5% - 7,5%
- 7,5% - 10%
- 10% - 15%
- 15% och över

**Tack för ert deltagande!**