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Customer Focus through Market Segmentation

- The Case of Volvo CE
and the Recycling/Waste Management Segment

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*"Try not to become a man of success,
but rather try to become a man of value."*

- Albert Einstein

ABSTRACT

Today, companies operating in heavy manufacturing industries experience more complex market situations. Customers are becoming more sophisticated and the competition is increasing. In order to survive, companies must become aware of how value is generated for customers to be able to satisfy their needs. An implementation of a market segmentation approach is a useful tool in becoming more customer focused, as it creates a better ability to identify how value is generated for customers in a segment and adjust its activities in order to provide solutions for their needs.

In order to see how value is generated in a segment and how a company can adapt its marketing and sales activities according to that knowledge, we have used Volvo CE and the recycling/waste management segment. To find out how value is generated for customers in this segment, we have used a theoretical framework consisting of customer-perceived value and its influencers organisational buying behaviour and positioning.

We have created a framework that can be used by a company in the heavy manufacturing industry to identify how customer-perceived value is generated in a specific segment. This understanding can be used to create segment specific marketing and sales strategies and as a result become customer focused.

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Göteborg, December 2001

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1 INTRODUCTION

To get an introductory illustration of the studied subject, we start the thesis by describing a concrete and theoretical background of the theme. The illustration brings us into the discussion of our problem statement, research problems and purpose, followed by an illustration of the case company.

Industrial markets are experiencing shorter and more intensive business cycles, which create both opportunities and threats for companies operating in these markets. The fluctuations have forced management to change their way of thinking and acting in order to keep the company's position. The main focus for management is no longer to search and attract new customers, but to satisfy and maintain existing customers. Keeping existing customers is less costly compared to finding new customers. Existing customers develop trust and commitment in their relationship with the supplier, which can become invaluable for both the supplier and the customers.

Research in marketing has, to a large extent, been focused on consumer marketing, which cannot easily be applied to industrial marketing. In recent years, however, industrial marketing has received more and more attention from the academic world. The emergence of industrial marketing has revolutionised the marketing concept for industrial products and services and created industrial marketing theories that emphasise an understanding of the customer and the value-generating processes. In contemporary industrial marketing research, ongoing trends in industrial markets concerning areas such as how value is created and how customers are buying are taken into consideration.

Customers in industrial markets are often more sophisticated and complex, and have different, more complex needs compared to customers in consumer markets, and this has formed the theories of industrial marketing. Marketing theories for companies operating in industrial markets have, as a consequence, changed from being product oriented towards becoming customer focused. A customer focus demands that the company understands the customers' needs, wants and behaviours in order to become successful. In order to get to know the

customer's requirements, the company has to start focusing on its relationship with the customer. A company with superior knowledge about the customer will have the ability to satisfy the customer by providing value through customised offerings and solutions.

In order to be customer focused, it is not enough for a company to only collect information data about the customer. The company must also know how to structure its own activities and organisation to be able to satisfy the customers' needs. The company must know how to organise itself and all its processes to be able to customise the offerings in an optimal way.

An important aspect for a company wanting to become customer focused is to look at its market and understand who its customers - both existing and potential - really are and what they are doing. Knowing this, the company can divide its customers into groups or segments based on certain characteristics, where the customers sharing a certain characteristics or performance are put into one group (segment). As a result of segmenting the market, a company may have to rethink its prioritising of customers. A group of customers may prove to be more profitable or important for the future than the company realised previous to the market segmentation study.

After segmenting the market into customer groups with similar features, the company should develop strategies for each of the segments. These strategies should be developed based on how value is generated in the different segments and should, therefore, become specific for each group of customers. As a result, the offerings become tailored for each segment to meet each segment's requirements. Market segmentation is thus a good tool for a company to become customer focused. For a supplying company operating in an industrial market, who wants to become more customer focused, a segmentation of its market might be a prerequisite. Segmentation may develop the ability to understand how to create value for the customers and adjust its marketing and sales activities according to that knowledge.

Implementing market segmentation in an organisation could be a risky and controversial issue for companies. It may involve not only changing the

products and services, but also the organisational structure and all activities within a company. Evidently, segmentation may cause a lot of problems and difficulties for a company if the implementation process is not dealt with in the right way. While research on *how* to segment an industrial market has been quite substantial, research on how to *implement* a segmentation approach into the organisation and adjust the activities according to the segment needs has been almost non-existent.

1.1 PROBLEM STATEMENT

Based on the discussion above, the main problem of this thesis is:

How can a multi-national company, operating in a heavy manufacturing industry, become more customer focused through a market segment oriented organisation?

The problem statement demonstrates the problematic, but necessary, issue for a company operating in an industrial market of becoming more customer focused. A useful tool to become more customer focused is to segment the market, which consequently will affect the company's own organisation. The objective of this thesis is to find answers to the problem statement through a case study.

1.2 RESEARCH PROBLEMS

In order to solve the problem statement, we have identified three research problems. To be able to answer the research problems, and thereby the main problem, each research problem is examined by looking at existing theories in the area before being applied to the case company and the findings of our study. Although they are strongly interrelated, the division of the three research problems is continuously kept separate in the theoretical part, the presentation of the empirical finding, and the analysis.

1. What do the customers' needs and wants look like and how will they change?

Companies who are looking to become more customer focused through working with a market segmentation approach must understand the customers' needs and wants. As a result, this study concentrates on how value is perceived and generated in the minds of the customers, which reveals customers' needs and wants and how these needs and wants will change in the future.

2. What does the customers' buying behaviour look like and how will it change?

The study includes the customers' buying behaviour and how it is affected and influenced by different factors from within and outside the organisation. Understanding the organisational buying behaviour in a segment is very important for suppliers in order to know how to adapt its own organisation, its segment strategy and its marketing and sales activities.

3. How is the case company positioned in terms of satisfying customers' needs?

To implement segmentation and improve customer focus, it is important to realise where the company is positioned in the minds of the customers. We believe that a company that knows its current position and understands how it should position itself in the future, can use this information to become customer focus in a more efficient way.

1.3 PURPOSE

The purpose of this thesis is to conduct an empirical and theoretical study to illustrate and illuminate how a manufacturing company operating in an industrial market can become more customer focused through the implementation of market segmentation. We aim to provide our case company with recommendations on how it can become more customer focused through a market segmentation, and thereby strengthen its position in the industry. We intend to develop a theoretical framework that can be used by a multi-national

company operating in the heavy manufacturing industry as a tool for evaluating and understanding customer needs in a specific segment and utilise this information in directing marketing and sales activities in the segment. A purpose of our study is thus to develop a model, which if used in the implementation of a market segmentation approach, leads to a better consideration of customers' needs.

1.4 DELIMITATIONS

For a company to shift from being product oriented to become truly customer focused, all processes in the company should be devoted to satisfy customer needs and generate value. By looking at customer-perceived value in one segment, implications on how the processes should be designed for customer focus is given. We limit the scope of our study to analyse and give recommendations only for *the marketing and sales activities*. We do not study or give recommendations for other processes within the company, such as product development, even though these are also affected by a shift towards customer focus.

To get a better understanding of how our case company should become more customer focused by implementing a market segmentation approach, it could have been useful to conduct a benchmarking of other actors in the construction equipment industry. A benchmark could also have been done on companies in other industries. Due to time limitations, such a study was not conducted. Carrying out such a study would have impeded the depth of the data collection and analysis of the case company.

1.5 CASE COMPANY

Volvo Construction Equipment (Volvo CE) is a part of the Volvo Group. Its headquarters are located in Brussels, Belgium. The company has been related to the Volvo Group since 1985, although the company did not become fully owned by the Volvo Group until 1995.

Today, Volvo CE is the fourth largest company operating in the construction equipment industry in terms of market share, with about six percent of global market sales. Its product line consists of five product groups: wheel loaders,

articulated haulers, excavators, motor graders and compact machines, which altogether provide the market with over 130 models. The company's most important markets are the West European and North American markets.

The company is organised into six product companies with individual product development, manufacturing and marketing activities. This structure is a result of historical reasons, mainly due to the fact that Volvo CE has acquired many product companies throughout the years.

As the construction equipment industry became more complex and difficult, Volvo CE realised the importance of being customer focused and accordingly started several projects. One of the recent projects is the implementation of market segmentation. As a result of a market segmentation project, Volvo CE segmented its customers into different groups according to the industry, to which the customers claim to belong. Out of the identified segments, Volvo CE selected five high priority segments. The next stage for the company in the segmentation process is to create an understanding of each segment so that the company's activities can be concentrated on satisfying the customers.

After an introductory part of the thesis and the problem, we discuss the methods and techniques we used in this study in the following chapter.

2 METHODOLOGY

In this chapter we give an explanation of the methods and processes we have used throughout our study and justify why we have used them. The purpose is to give the reader an understanding of the progress of the study and on what grounds the methodology used was chosen. To support and give insight to our choices, a review of methodology theory is given. We start by describing our research strategy, followed by our research approach and the research method. Thereafter, we describe the data collection and the data analysis. We end the chapter with a discussion about the quality of the research, and we illustrate the conduct of our research in a research model.

2.1 RESEARCH STRATEGY

Before a researcher can begin the actual research, a research strategy on how to conduct the study must be designed. How the research strategy will be designed depends upon what kind of research questions the study aims at answering, the need for control over behavioural events, and the degree of focus on contemporary versus historical events. Yin (1994) divides the research strategies into five different types: experiment, survey, archival analysis, history and case study. We have chosen the case study as the research strategy for our study. A motivation of our choice of research strategy is given below.

It is important for the researcher to realize that each type of research strategy represents a different way of collecting and analysing empirical evidence and, most importantly, each strategy has its own advantages and disadvantages.

To help the researcher choose the right research strategy, he/she should consider whether a qualitative or a quantitative research method is most suitable for the study. There are several differences between the two. The factor that most determined choosing a qualitative approach method for our study was the fact that a qualitative research method is focused on understanding situations in their uniqueness as part of a particular context and the interactions there (Merriam, 1998). When using a qualitative research method, the key concern is to understand the phenomenon of interest from the participants'

perspectives, not the researcher's. In qualitative research, this means that the researcher is the primary instrument for data collection and analysis. A qualitative research usually involves fieldwork, where the researcher must physically go to the people, setting, site, and/or the institution (the field) in order to observe behaviours in a natural setting and meet and interview people face to face. In our study, going out to meet people on site and interview them face to face was a prerequisite in order to grasp all aspects of the research problems and main problem we wanted to answer. Since a qualitative research focuses on process, meaning, and understanding, the product of a qualitative research, according to Merriam (1998), is *richly descriptive*, which fits our research problems better.

2.1.1 CHOOSING A RESEARCH STRATEGY

According to Yin (1994), research questions that are of the types “how” or “why” are likely to lead to the use of case studies, histories, or experiments. Our main problem is a “how”-question (*How can a multi-national company...*). In our study, we had no control of the events we studied, and we studied a contemporary phenomenon in a real life situation, which made a case study the most suitable research strategy for our study. To be able to answer the research problems we had to thoroughly look into Volvo CE at different levels – from top management to customers – in order to get a good understanding and a holistic view of the company. A case study is the most suitable research strategy in a situation like ours. One purpose of our study is to use the results of the study of our case company by generalising the results and develop a theoretical framework more generally applicable to multinational companies operating in a heavy manufacturing. The analytical generalisation of our findings is meant to be applicable to other large companies in industrial markets who are looking to become more customer focused through working with a market segmentation approach. Case studies are preferred according to Yin (1984) when the research is striving towards becoming an analytical generalisation.

2.1.2 GENERALISATION OF THE CASE STUDY

A case study as a research strategy is not uncontroversial. It has been met with some scepticism and criticism. Some of the criticism is about the possibility of

generalising the results from such a small basis as the study of one company. Some scientists claim an analytical generalisation cannot be done from a single case, since one case study is not enough as a research foundation from which to draw general conclusions. In our case, the purpose is not to draw conclusions or to do a generalisation that is statistically proven. Instead, the purpose with our study is to generalise our findings from the case study in order to *expand* and *generalise theories*.

Another great concern with a case study strategy is the lack of rigor in the research design. Since the findings are not based on absolute figures, there is concern that the researcher may have a biased view that will influence the findings of the study, by interpreting the empirical evidence in a biased way or by only collecting certain data that will prove his/her point. In our discussion concerning reliability and validity, we develop our way of dealing with the sometimes justified criticism of the case study as a research strategy.

2.1.3 SELECTING THE CASE TO STUDY

In order to study how a multinational company can become more customer focused through a market segment oriented organisation, we have studied Volvo CE.

Volvo CE, a company who previously has worked with many students at the International Business program at Göteborg School of Economics and Commercial Law, fitted our problem and our prerequisites well. The company is very well aware of the need for improvement concerning customer focus in certain areas of the company and has already undertaken several projects in order to improve. Previous to the start of our master thesis writing, the company had made a market segmentation study and selected five high-priority segments for the future. However, Volvo CE had not implemented market segmentation into the organisation.

In order for us to see how the company could become more customer focused in a market segment organisation, we chose to study one of the segments the company had chosen for the future, the recycling/waste management segment. The reason for choosing one segment out of the five to study was partly due to

the limitations of the scope of the study, as we had limited time and limited budget. Also, choosing more than one segment would not have given us the insights and the deep understandings that we were able to get by studying only one segment.

We chose to study the recycling/waste management segment out of the five high-priority segments due to a combination of several factors. First, Volvo CE already had ongoing pilots – internal segmentation implementation teams – working with two of the other high-priority segments. Although our study and the pilots have quite substantially different approaches, we, together with the case company, decided it was more interesting for us to look at one of the other three segments. The recycling/waste management segment proved to be most suitable for us. Volvo CE representatives said previous to the start of the thesis writing that they believed this segment was very interesting for the future and that they thought it could grow in importance and size, but they had limited knowledge about the segment. They also knew that the countries in Western Europe were driving the development. These countries' progress in the environmental area, which is closely related to the recycling/waste management segment, is often followed by other countries. This segment also seemed to fit our main problem and research problems well. It is a segment with complex customer needs, complex buying behaviour and substantial sales, and one where Volvo CE did not have sufficient knowledge about how value was generated in the minds of the customers. Volvo CE was also unsure of its own position in the minds of the customers. Our perception was that our findings from this segment and the methodology used here could also be used when studying other segments for our case company or for other similar companies in similar situations and similar industries.

In our study of the case company, we focus on its marketing and sales activities in the recycling/waste management segment. In a customer focused company working with a market segmentation approach, all processes in the company become interconnected through the objective of providing solutions. Therefore it is unavoidable to touch upon processes closely interrelated to marketing and sales activities in such a company, for instance product planning and

development. We do not, however, have the intention to study other activities thoroughly apart from marketing and sales.

2.2 RESEARCH APPROACH

Before we constructed our main problem and our research problems, we had a basic knowledge about existing theories. We approached the case company and the problem with a deductive approach. In order to answer our main problem and research problems, we had an inductive approach as we identified existing theories and created a theoretical framework. This theoretical framework was used in a deductive approach as we conducted our empirical study. The empirical evidence was analysed in an inductive approach as we used the theoretical framework for the analysis. Shifting approach once again to a deductive, we answered our main problem and research problems in the conclusion. Bringing our study back to the theoretical framework and the inductive approach, we came up with theoretical conclusions regarding the framework that was used in our study. The theoretical conclusions are placed in the same chapter as our conclusion for the main problem and the research problems. We found this arrangement to be more logical, as our recommendation should be considered with our theoretical conclusions in mind.

2.3 DATA COLLECTION

Data collection for a study can consist of the collection of either secondary data or primary data or a combination of the two. In our study, we have collected both secondary and primary data.

2.3.1 SECONDARY DATA

Secondary data is data that is not initially collected and presented for our purpose. This type of data could be used both as part of the study and to give valuable background information. Secondary data often consist of articles, books, internal case company material, and Internet material.

In our study, the secondary data was used mainly for two purposes. First, we used secondary data in the form of existing theories as an introduction to the theoretical study. These theories, which were used as secondary data, were only

collected to give a background to the studied subject and not used in the construction of our theoretical framework. Second, we studied a lot of internal Volvo CE material in order to get a better picture of the company and its current position. Parts of the secondary material we received from Volvo CE were also used in the empirical evidence, to give the reader a better understanding of the case company and place our study in the right context. We also used secondary data to get an understanding of the waste management industry.

Since the secondary data used was not collected for our research problems specifically and the original collection, filtering and presenting of the information thus were out of our control, it could include errors. We have, however, used acknowledged sources to limit the risk of errors from secondary sources in the study.

2.3.2 PRIMARY DATA

Primary data is the ‘virgin data’ collected for our research specifically and thus the data collection was designed to fit our research problems. There are several different ways to collect primary data in a case study. The most common types of data collection are interviews and observations. (Merriam, 1998)

In our study we have used existing theories both as primary and secondary data. In conducting our theoretical framework, we have used existing theories about value, organisational buying behaviour and positioning. As these were employed in a framework, which was created and used distinctively for our study, they can be seen as primary data.

Interviews are one of the best ways to collect the primary information. In our study, we chose to collect the primary data mainly through interviews. The reason for this was that we felt that meeting our interviewees on site and face to face would provide us with better answers. It also gave us the ability to respond to situations that came up during the interview and ask the interviewee to develop or explain an answer better. Interviewing people in their own environment may give the interviewee a stronger feeling of security, which could improve the quality of the answers. By interviewing people on site we

could also take more things into consideration when ‘decoding’ the answers, such as the environment where the interview took place, the mood of the interviewee, and body language.

The primary data was collected during field studies in Brussels, Belgium, where Volvo CE’s headquarters are located. It was also collected during field studies in Duxford, the UK, where Volvo CE’s sales company for region Europe is located together with the Volvo CE owned dealership for Great Britain, Volvo CE Europe Ltd. We also collected the primary data during visits to Eskilstuna, Sweden, where we met people from Volvo CE Wheel Loaders AB and Volvo CE Corporate Product Planning and Development.

The reasons why we chose to interview customers, dealers and Volvo CE staff in Sweden, the UK, and Belgium were a combination of practical matters and academically based matters. Restrictions of the scope of the thesis due to time and resources made these countries suitable for us to study. Volvo CE’s headquarters are located in Brussels and since it was important for us to get the point of view of all levels of the company, interviews with Volvo CE at the headquarters was necessary. Since Volvo CE is a Swedish company and Sweden is its historical home market and Volvo CE has a unique market position in Sweden, and Sweden was easy accessible for us, Sweden was one of the countries chosen to study. The UK was a good market for us to visit, since Volvo CE’s sales company for Europe is located there in the same building as the dealer for Great Britain. Also, the dealership in Great Britain is not independent, as normally is the case, but owned by Volvo CE, which made it interesting to study. Sweden and the UK are also countries where the recycling/waste management industry is well developed and environmental awareness is high on the political agenda and the public opinion is driving the development in the environmental area.

The collection of the primary data started during our first trip to Brussels, Belgium, where we met two persons who have helped us a lot during our thesis writing, Hans Josefsson and Lars Ångman. These were informal meetings in order to get a better view of the company and its current position. During the second visit to Volvo CE’s headquarters in Brussels, we interviewed four

persons in the top management of the company. These interviews were semi-structured, meaning that we used a guideline (see appendix E) to lead the discussion in the direction we wanted in order to cover the necessary areas in the interview. Apart from the guideline the discussion was not structured and we had an open discussion with the interviewees. We were, thereby, able to respond to situations that occurred during the interview and ask the interviewee to further develop and explain issues discussed during our interviews.

During the field study in Duxford, the UK, we had the opportunity to meet the president of the sales company of region Europe. We also interviewed members of the top management of the Volvo CE dealer in Great Britain, Volvo CE Europe Ltd.; namely, the president and the national sales manager of the dealership. During the interviews with dealers, both in Sweden and the UK, we used a discussion guideline (appendix D).

It was of vital importance for us to meet people at different levels and in different parts of the organisation. Thus it was very interesting to meet people in the organisation at the Volvo CE headquarters in Brussels and the top management in the region Europe sales company, as well as meeting people at the dealership in Great Britain. In order for us to get an even better understanding of the company and how marketing and sales activities look today, we spent two days out on the field with sales people in England. During this time we observed how the sales people worked. We also had a lot of time travelling around in the car to ask all we wanted to know about for example sales approach and activities, customer needs and behaviours, and the sales people's point of view of Volvo CE.

The sales people also gave us a better picture of the customers in the recycling/waste management segment – their characteristics, needs and the way they are buying. In order for us to understand customers and how Volvo CE's products are being used in the segment, we visited two large private customers in landfilling activities, where we could observe how the products are used. During the visits to these two large customers, we interviewed three customers with good knowledge about Volvo CE and its competitors. During the interviews we also used a discussion guideline (appendix C).

To further improve our understanding and get a more holistic view of Volvo CE, the dealers, the segments and the customers, we visited Eskilstuna, Sweden. During our time there, we mainly interviewed people at Volvo Wheel Loaders AB in different positions, such as market support managers, directors of marketing and sales, and product planning. We also met a director of corporate product planning. This gave us the point of view of the product companies, which was added to the picture we had from our previous interviews. During the Eskilstuna trip, we also interviewed two product engineers at Swecon, the Swedish Volvo CE dealer. Swecon is an independent dealer, while the dealer in Great Britain is not independent. The Swecon people had a great deal of experience with Volvo CE and also knew a lot about sales in Sweden. We also made a visit to a public customer in Sweden in the recycling/waste management segment, who we interviewed.

To support our qualitative findings from the interviews, we conducted a quantitative survey that was sent out to both existing and potential Volvo CE customers in the recycling/waste management segment in Sweden and England (see appendix A and B). Before the surveys were sent out, we made a phone call or a visit to the customer. After locating the right person to send the survey to, we explained the scope of the survey to ensure that the person had the necessary knowledge to answer the survey. To minimise the risk of misunderstandings when the respondents filled in the survey, we briefly explained how the survey was constructed and how it was to be filled in, which complemented the instructions given at the actual survey. We located twentytwo persons in different companies in the recycling/waste management segment to whom we sent the survey. Out of these, we got nine surveys back. We found that the number of answers of the survey were too few and sometimes not sufficiently answered to give us statistically proven figures or to use to make tables and models. Thus, the results of the survey have been used to support or to question our findings from the interviews, but the results are not presented in absolute figures.

To get insightful information about legal and political issues that influence and will influence the recycling/waste management segment, we conducted a phone interview with a desk manager responsible for recycling/waste management in

the Environment Directorate-General working in Brussels at the European Commission.

During our interviews with Volvo CE in Brussels, Duxford and Eskilstuna, we used a tape recorder in order to concentrate on the answers and better respond to situations during the interview, such as asking the interviewee to further explain or analyse an issue. The tapes also made certain we did not miss out any details or afterwards could misinterpret our notes. No person we interviewed disapproved of using a tape recorder and we do not think the tape recorder restrained the Volvo CE people or the people at the dealerships in the UK and Sweden we interviewed in their ability to answer as truthfully as possible.

When we interviewed customers we did not, however, use a tape recorder. This was a choice we had made in advance, since we felt that it would be easier to have a dialogue with the customer and he would speak more freely and out of his heart than if he knew everything he said was taped. To be able to have a discussion where we could respond to upcoming issues and ask him to further develop his answer, but at the same time writing down important things and quotes said during the interviews, one of us were mainly keeping notes while the other was leading the discussion with the customer.

2.4 QUALITY OF THE RESEARCH

Merriam (1998) presents three different criteria, which can be used to test and establish the quality of the research: *internal validity*, *external validity*, and *reliability*.

2.4.1 INTERNAL VALIDITY

Internal validity is a measurement to see if the findings from our study match the reality. A study with strong internal validity is one where the findings capture what really is there in reality; thus, the findings presented in the study fit the reality. It questions if the investigators are observing and measuring what they think they are measuring.

What we have observed is *our* construction of reality and how we understand the world. Since the researchers are the primary instrument of both the data collection and analysis, the interpretation of reality is a direct product of our interviews and observations. To fully understand how and why we interpret the reality the way we do, complex research about human behaviour and what effects our perceptions is needed.

To enhance internal validity, *triangulation, member checks, long-term observations, peer examination, participatory modes of research, and clarification of the researcher's biases* can be good methods.

Triangulation involves using multiple investigators, multiple sources of data, or multiple methods to confirm the emerging findings and was used to increase the internal validity. We have used multiple sources of data with interviews with over twenty people from Volvo CE, dealers and customers, where we have interviewed people in various positions. We have used the findings from the interviews, which are presented in the empirical evidence, in the analysis. The analysis forms the base for our recommendations and conclusions. The findings from these interviews were combined with the empirical evidence and analysed.

To avoid misinterpretations, we have not used data collected that we were not sure how to interpret. Sometimes we have gone back to the source to ask the interviewee to further develop an answer given to our question during the interview.

The fact that we are two researchers has decreased the risk of biases in the study, even though we have a rather similar background and education and a rather similar point of view when looking at the business environment.

The internal validity could have been further enhanced by more interviews with Volvo CE personnel, dealers and customers in more countries. However, limitations in time and practical matters, such as the inability to travel to more countries than Belgium, the UK and Sweden, impeded a further enhancing of

the internal validity. A repeated observation would also have enhanced the internal validity, but was not possible.

The results were also read and commented on by our supervisors as the thesis emerged.

After discussing the internal validity of the empirical findings, a discussion of the internal validity of the theoretical findings could be useful to illustrate. The internal validity of the theoretical findings is harder to estimate and secure. To enhance the internal validity of the theoretical findings, the same methods can be used as for the empirical findings. Our theoretical conclusions derive from the use of a theoretical framework in the empirical study. This framework was used during interviews with multiple sources of data (triangulation). This triangulation meant that our framework was comprehensively evaluated, which increased the likelihood that our theoretical conclusions had internal validity. Also, before using the theoretical framework in our empirical study, our supervisors commented and came with advices of its composition.

2.4.2 EXTERNAL VALIDITY

If a study has a strong external validity, the findings of the study can be generalised to other case studies than the initial case study. Our choice of research strategy, a case study, increases the possibility of academic generalisations beyond our study, since theoretical generalisations can be made from case studies.

To discuss external validity, the study must have internal validity. Above, we argue that we believe our study has sufficient internal validity.

In our study, we have not tried to generalise the findings directly related to our case company. We have, however, generalised our theoretical findings from the use of our theoretical framework in our study of one company, and one segment in one industry.

According to Merriam (1998), the possibility of generalising the findings of a study like ours is enhanced if the study contains a “rich, thick description” of

the studied phenomenon, so that readers are able to determine how closely their situation match the research situations. We have thoroughly described the case company and its ongoing shift from being product oriented to being customer focused with a market segment oriented organisation, as well as methodically described how value is created in the studied segment by looking at the three concepts: value, organisational buying behaviour, and positioning.

2.4.3 RELIABILITY

In a study with a sufficient reliability, a new study made using the same format as the initial study would generate the same results. That is, if a later investigator followed exactly the same procedures as we have, would that person reach the same findings and conclusions as we have? The goal of reliability is to minimise the errors and biases in a study.

Merriam (1998) argues that reliability in the traditional sense does not fit qualitative research. The reliability of a case study like ours can instead be tested in terms of *dependability* or *consistency* of the results obtained from the data, for example if the results are consistent with the data we have collected. To ensure that the results are dependable, an investigator can explain the assumptions and theory behind the study, describe in detail how the data that was used to arrive at the results was collected, and use triangulation.

In Chapter 3, the theories we have used, both our own theoretical contributions and other researchers' theories, are described in detail. The empirical evidence is described systematically in Chapter 4. In appendix C, D and E, we have included the interview guides used, both the guides used during interviews with Volvo CE people as well as the guides used during interviews with dealers and customers.

When we discussed the internal validity we mentioned that we have used triangulation. We have used multiple sources of data and different methods of data collection. Data was collected through personal interviews, a phone interview, surveys, and studies of secondary data.

In the next chapter, chapter 3, we explain the theoretical framework we have based our study on, together with a theoretical background to the subject. The chosen theories break down and define the research three problems, which creates the ability to solve the main problem.

Before the theoretical study is presented, an illustration of the research procedure during the writing of this thesis is given (see Figure 1). This model shows the main problem (problem statement) and the research problems and the basic process how we carry out the research in order to solve the problems.

2.5 RESEARCH MODEL

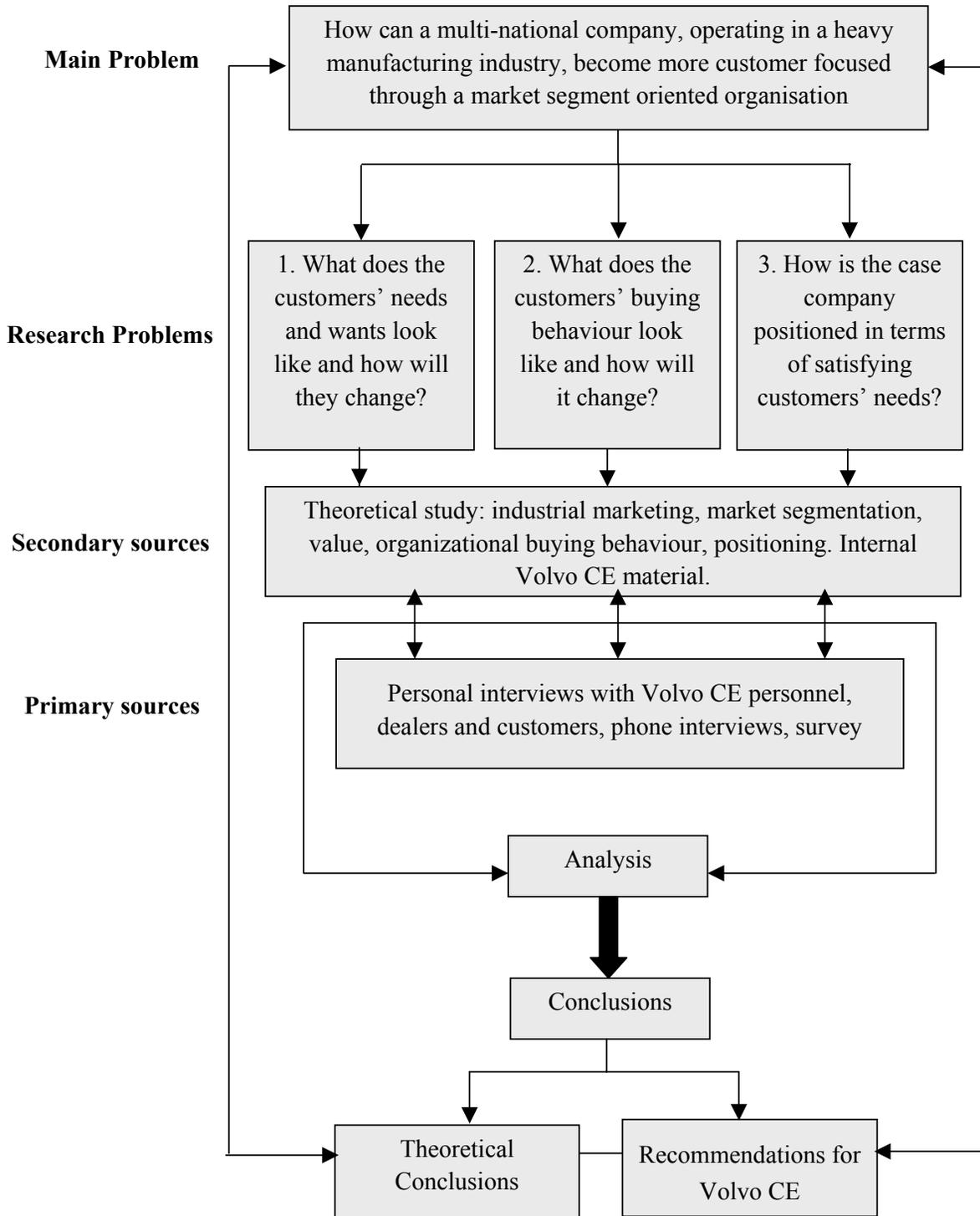


Figure 1 Research model.
Source: own

3 THEORETICAL STUDY

In this chapter we present the theoretical concepts we used as a basis for answering our main problem and our research problems. The theories are strongly interrelated and should not be viewed separately, but as one entity. However, the different theories presented may relate more to the main problem or one research problem, but combined they form a foundation for answering the main problem.

We have chosen to divide this chapter into two distinct parts: *theoretical background* and *theoretical framework*. We start with the theoretical background, which gives the reader a general explanation of the characteristics of industrial markets and industrial marketing, followed by a discussion of segmentation from a theoretical point of view. We created a seven-step process that shows the procedure how a company, such as our case company, can move from being product oriented to becoming customer focused using a market segmentation approach. In the same section, we point out where our thesis will integrate with Volvo CE's progress in the seven-step process. Volvo CE has already gone through the first four steps of the seven-step process.

After this background section we enter the theoretical framework, which is the actual foundation of our study. Here we discuss the central concept of customer-perceived value. Our perception of the concept is that the customer-perceived value is the perceived value a supplier's products/services generates in the minds of the customer – an equation of the perceived benefits and the perceived sacrifices - but it is also influenced by the customer's organisational buying behaviour and the supplier's position in the minds of the customer. Theories about value, organisational buying behaviour, and positioning together form a framework for how customer-perceived value is generated in the segment and how to implement a segmentation approach in the organisation accordingly.

3.1 THEORETICAL BACKGROUND

The purpose of the theoretical background is to give an overview of our study and place the main problem and the research problems in its correct context. The theoretical background gives the reader a foundation before moving on to the theories related to the actual study.

3.1.1 INDUSTRIAL MARKETING

Industrial marketing – the marketing of products and services to business customers – has a few characteristics in common with marketing to consumer markets. One of the main characteristics industrial marketing and consumer marketing share is that both the industrial market and the consumer market involve people who assume buying roles and make purchase decisions to satisfy needs (Kotler, 1996). However, there are some basic differences between the marketing of industrial and consumer products. Jansson (1994) summarizes the differences by dividing them into four characteristics:

1. *Market structure:* The market concentration tends to be greater for industrial products. The number of buyers is normally smaller in the industrial market compared to the consumer market.
2. *The interrelationship within the system:* In an industrial market, the interrelationship is closer, especially in the vertical dimension, which concerns interrelationships in various stages of production. The buyer-seller relationships are closer in industrial markets; thus, creating and nurturing relationships is most vital for actors in industrial markets.
3. *The durability and stability of the interrelationships:* Not only are the interrelationships between parties in industrial markets closer, they are generally more stable and long-term compared to interrelationships in consumer markets. For industrial markets, geographical concentration tends to be greater and the number of customers fewer. Compared to consumer markets, the individual customer tends to be greater in size and the competition often shows signs of being oligopolistic.
4. *The type of demand:* Compared to consumer markets, the buyers in industrial markets generally have more complex and sophisticated needs.

The demand situation is therefore different and the buying process often far more complex in industrial markets.

As these differences suggest, buyers in industrial markets are more willing to seek a long-term relationship with suppliers. According to Håkansson (1982), purchasing firms in industrial markets benefit from stability in the supplier relationship and, therefore, have an unwillingness to change suppliers. Four different groups of explanatory factors for the unwillingness to change suppliers and instead seek long-term relations can be distinguished:

1. *Search and evaluation problems*: The products bought in industrial markets are often complex and most vital for the buyer's daily operation. The buying firm must be well informed about a potential supplier's technology, service ability, and its trustworthiness. The cost of making a mistake in supplier selection by using a supplier who delivers an unsatisfactory product or does not have the proper skill to deliver services can be enormous. To reduce the risk of such costs, buyers tend to be unwilling to change supplier from someone that historically has been successful in delivering products and services that sufficiently covered their needs. Regarding infrequently purchased products, the buying firm often requires considerable information from suppliers from whom it has not purchased in the past. The buyer will consider these offers and compare it with offers from companies whom he/she has purchased from before and thus has an established relationship with.
2. *Problems in product use*. Problems related to the buying firm's internal routines and the degree of experience of its staff and can be reduced by the stability of supplier.
3. *Technological adaptation problems*. Often, the products purchased for use in production are intimately related to the production process. Thus, a change of one purchased product used in the production can influence the whole production process or the fundamental characteristics of the firm's end product. Consequently, a change of supplier when replacing a machine could result in a need to change other components or machines. Also, there is often a technology know-how transfer between the buyer

and the supplier – a know-how that takes time to build up and is not easily transferred or replaced. These are factors impeding a change of supplier.

4. *Market concentration problems.* Since industrial markets often consist of a limited number of buyers and sellers, a change of supplier by a buying firm will be observable by other actors and counteractions may be taken. A firm should, therefore, plan any action with regard to the possible response of other companies. The probable responses by other actors suggest an obstacle for a change of suppliers.

From Håkansson's and Jansson's findings, it seems evident that a buying firm in an industrial market generally seeks *long-term relationships* with its suppliers. Customers' demands have changed and many buying firms are seeking suppliers that can provide them with *tailored solutions* and not only standardised products. As a result, buyers are seeking suppliers who not only sell superior products, but also have the ability to offer the necessary service and support. Buyers, as well as sellers, in the industrial markets are therefore seeking to create and maintain long-term relations with companies with whom they can *mutually create value*.

Customers' increased interest in long-term relationships with suppliers is driving the industrial markets, forcing actors to change. Customers are seeking suppliers who can provide total solutions tailored for their individual needs with whom they can mutually create value. Suppliers must recognize the unconditional need to become more customer focused in order to survive. The general trend in many industrial markets is that it is not enough to provide the customer with high quality standard products; the supplier must have the ability to provide customised products and services. The supplier is, therefore, required to have a great deal of knowledge and understanding regarding the customers, their businesses and activities. This is a tough situation for a supplier working with numerous different markets and customers. A useful tool to become more aware of the customers and customers' businesses and activities is to segment the market, identify the most interesting segments and thereafter identify the characteristics of the customers in those segments.

Before entering the theoretical framework, we will shortly discuss segmentation from both a theoretical and a practical approach.

3.1.2 MARKET SEGMENTATION

This section examines market segmentation to get a better understanding about the concept and how it can help a company become more customer focused.

Market segmentation can be defined in numerous ways. Our definition of the concept is based on McDonald and Dunbar (1998):

“Market segmentation is the process of splitting customers, or potential customers, within a market into different groups, or segments, within which customers have the same, or similar requirements satisfied by a distinct marketing mix” (McDonald & Dunbar, 1998, p. 15).

This definition contains the most basic and important factors of market segmentation. Within a market, there are groups of customers with comparable needs, wants and behaviours. From a seller’s perspective, acknowledging this is a great opportunity to become customer focused by creating strategies to satisfy the segments’ various requirements.

Market segmentation is also a driving force for a company to become more customer focused as the very basic prerequisite of the concept is that a company has to look closely at the customers, both existing and potential. Companies should develop specific marketing and sales strategies for each customer group or segment. The company that discovers the customers’ requirements and is able to customise the products and services in the most effective way will be successful. (McDonald & Dunbar, 1998)

Over the years, researchers have suggested several different variables on which to base the segmentation. According to Mitchell and Wilson (1998), the most useful variables are organisation type, customer data, size of the account, geographic location, purchasing structure, type of purchase, decision making process, organisational innovativeness, and social networks. Volvo CE has

chosen to use the customer's organisation type – the type of business the customers are in - as the variable for its segmentation approach, which we believe is an appropriate way for Volvo CE's market segmentation. Therefore, it will not be the scope of this thesis to question the actual segmentation made by Volvo CE.

There is a lot written about how to segment a market (Webster, 1991; Söderlund, 1998; McDonald & Dunbar, 1998), but remarkably little is written about how to implement a market segmentation approach in an organisation. To illustrate how a company can move from being product oriented to becoming customer focused and working with a market segmentation approach in marketing and sales activities, we have developed a basic seven-step process, showed in Table 1.

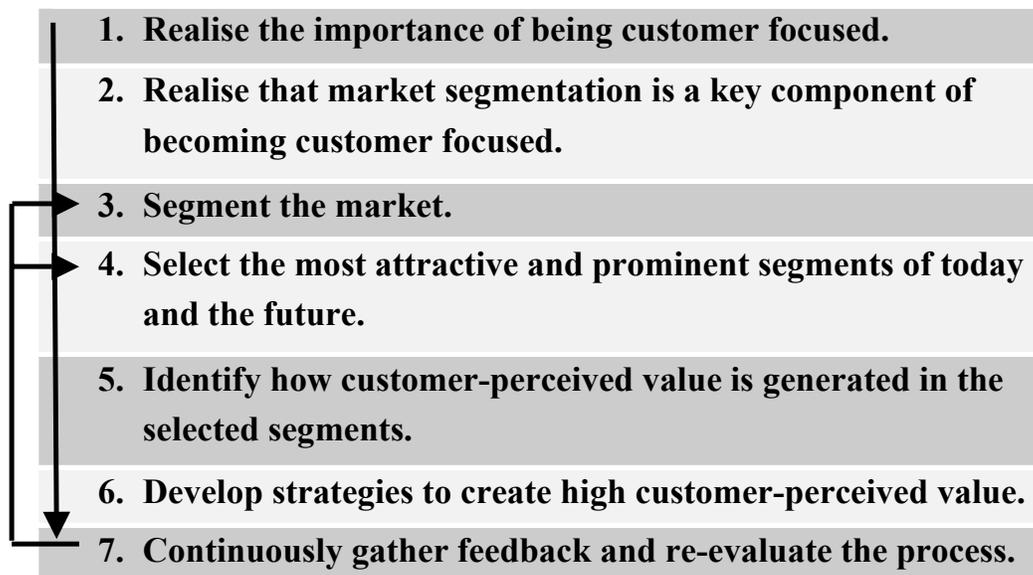


Table 1. Customer focus through market segmentation. Source: own

After realizing the importance of being customer focused and that market segmentation is a key component of becoming customer focused, a company should segment the market and select the most attractive and prominent segments of today and the future.

After the selection of the most attractive segments, a company should look at each segment closely and identify how customer-perceived value is generated in each of the prioritised segments. After obtaining knowledge about how customer-perceived value is created in a segment, the company should develop strategies in marketing and sales activities in order to create high customer-perceived value for customers in the prioritised segments.

It is important to notice that a company working with market segmentation should redo and re-evaluate its findings once in a while. A segment that according to the segmentation study is a high priority segment at one point in time might be a medium or low priority segment a few years later. Equally important is understanding that how customer-perceived value is generated is also volatile and, therefore, must be re-assessed regularly. The re-evaluation step of the process, which is a part of the last step together with feed-back, is not discussed further in this thesis, since our case company has not yet reached the last step of the process.

Our case company, Volvo CE, has started to proceed through this seven-step process. Before the initiation of this thesis, the company had gone through the first four steps of the process. How this has been done is shown in Table 2. Volvo CE's proceeding through the first four steps is further developed in the Empirical evidence, section 4.5.1.1 and 4.5.1.2. It is not within the scope of this study to evaluate the steps that Volvo CE has already gone through in the process of going from product oriented to becoming customer focused by implementing a market segmentation approach. For this reason we thus does not consider if the market segmentation is correctly done or could have been based on one of the other possible criteria. The fact that Volvo CE has gone through the first four steps of the process and is continuously working in different projects with a market segmentation implementation indicates that the company is 'on the right track' of becoming more customer focused with a market segmentation approach.

Step in segmentation process	Volvo CE	Checklist
1. Realise the importance of being customer focused	One of the long-term objectives for Volvo CE stated in the '95 study: <i>“to have a customer and segment focus”</i> .	√
2. Realise that market segmentation is a key component of becoming customer focused	See above	√
3. Segment the market	“Market Segmentation and Product Planning Project”, by Volvo CE together with Accenture presented spring 2001. 12 segments identified.	√
4. Select the most attractive and prominent segments of today and for the future	5 segments selected as High priority segments in the short and long term perspective.	√
5. Identify how customer-perceived value is generated in the selected segments	Left to be done. Study how customer-perceived value is generated in the recycling/waste management segment done in this thesis	
6. Develop strategies to create high customer-perceived value	Left to be done. Recommendations how to proceed in the recycling/waste management segment given in this thesis.	
7. Continuously gather feedback and re-evaluate the process	Left to be done.	

Table 2. Volvo CE's accomplished steps in the seven-step process. Source: own and Volvo CE

Our study emphasise, both theoretically and practically, how a company should proceed especially in the fifth but also indirectly in the sixth step of the process. Since Volvo CE has accomplished the first four steps, we are evaluating how it should accomplish step five of the process in one of its high-prioritised segments, the recycling/waste management segment. The findings of step five

give implications to step six. Only after knowing how customer-perceived value is created in a segment, a company will know how to create strategies for its marketing and sales activities in the segment.

Thus, our study specifically deals with the steps after the actual segmentation of the market is done. Steps five and six are stages of implementing a market segmentation approach in an organisation. In the theoretical framework, we explain the concept of *customer-perceived value* and the related theories of value, organisational buying behaviour and positioning. A company in Volvo CE's stage of implementing segmentation must analyse these three areas - value, organisational buying behaviour, and positioning - and also look at its current activities in order to see what needs to be done or done differently to successfully implement a segmentation approach that fully facilitates a customer focus in each segment. The result of the implementation must fit the company's long-term objectives.

The following part of this chapter develops the theoretical framework for identifying the customer-perceived value in a segment. This theoretical framework is a basis for how a company such as Volvo CE should evaluate the customer-perceived value before it can develop efficient marketing and sales strategies in order to create high customer-perceived value.

3.2 THEORETICAL FRAMEWORK

In the theoretical framework, which relates mainly to step five in the seven-step process, our definition of customer-perceived value is presented. The customer-perceived value consists of three concepts: value, organisational buying behaviour, and positioning. All three concepts are evaluated separately. We also show how they are interrelated in the customer-perceived value concept.

3.2.1 VALUE

We start to clarify the foundation of customer-perceived value, namely the concept of value, before we bring the discussion to our perception of customer-perceived value.

3.2.1.1 Introduction to the Value Concept

In recent years, the customer value concept has received a lot of attention from both the academic world and the managerial world. Research has shown that greater levels of customer satisfaction lead to a greater level of customer loyalty and retention, positive word-of-mouth, a stronger competitive position, and, ultimately, a higher market share (Ulaga & Chacour, 2001). Academic research has undergone, and is still undergoing, a paradigm shift from transaction marketing to relationship marketing (Sharma & Sheth, 1997). Value is considered to be an important constituent of relationship marketing and the ability of a company to provide superior value to its customers is regarded as one of the most successful competitive strategies. This ability has become a means of differentiation and a way for companies to establish a sustainable competitive advantage (Grönroos & Ravald, 1996). For organisations operating in business markets, knowledge of value is considered highly critical and it is most crucial to understanding their offerings and learning how they can be enhanced to provide value to their industrial customers. Organisations need to understand what drivers that create value for customers in order to build a competitive advantage (Lapierre, 2000).

In industrial markets, research about the value construct is quite limited, while research focusing on consumer products and services is extensive. The value construct has, to a certain degree, been neglected historically in industrial marketing, leaving it to other processes or departments in the company, such as engineering or production management.

3.2.1.2 Definitions of Value

The term *value* has been used in several disciplines such as economics, accounting, finance, strategy, production management, and marketing (Ulaga & Chacour, 2001) and the term has been defined in many different ways. In marketing, researchers have used various terminologies to describe value. Customer satisfaction, customer delight, customer loyalty, and customer value are a few of the terms used. The value concept can be hard to fully comprehend for traditional marketers since it requires a fundamentally different way of thinking, compared to transactional marketing.

Customer value can be seen from three different perspectives (see Figure 2) in a theoretical study (Ulaga, 2001). The most common perspective on value research in business markets has been oriented towards the assessment of how suppliers create value for their customers and how customers perceive superior value in a supplier's offering (*the buyer's perspective*). This is the perspective we have chosen in our research. A second perspective is *the seller's perspective*, where the emphasis is on how to attract, develop and retain customers. Since many business markets of today are organized as networks, many firms jointly create value through relationships, partnering, and alliances. In this context, a third perspective, *the buyer-seller perspective* is an option.

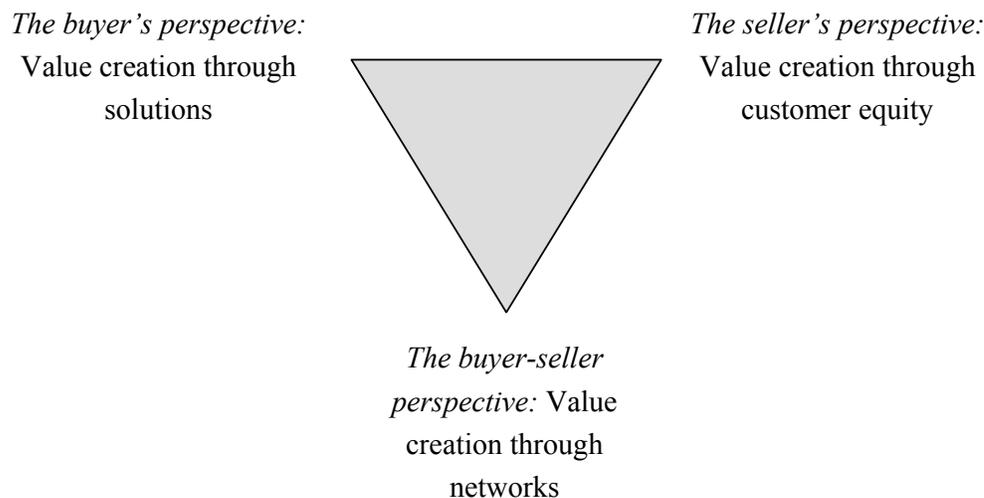


Figure 2 The three perspectives of value. Source: Own. Based on Ulaga (2001)

The first perspective is the preferable for research focusing on how a company can improve its customer offerings in order to create value for the customers, since it is the perspective that focuses most on how value is created for customers. It also allows a company to see where it should position itself. The second perspective is more focused on how value is created for the supplier through the management of customer equity. The third perspective considers how value can be created jointly between suppliers and customers. The third perspective is better used in industries with a very high level of vertical integration in all processes. In our research, we have found it most suitable to

use the buyer's perspective for us to see how suppliers' can create value for themselves by being better to understand how they can create value for their customers.

Value, when seen from a buyer's perspective, or *customer perspective*, is not the product or services bought by customers, but the *benefits* goods and services provide them with, and the *sacrifices* a customer faces by buying the product or service. Customers buy *offerings* consisting of goods, services, information, personal attention and other components (Grönroos, 2000). The value of goods and services to customers is not produced in factories or in offices. Instead, value to the customer is created in the *value-generating processes* of the customer, when customers use the solution or package they have purchased. Customers are looking for solutions or packages, which they can use so that value is created for them. Firms should, therefore, no longer think in terms of providing customers with products or services. Instead, they should provide customers with *solutions* consisting of all the components required to function in a value-creating way in the customers' own value-generating processes (Grönroos, 2000). That often means that companies must broaden their offerings. If a company is selling a technologically advanced machine, it must also be able to provide the customer with training, maintenance, repair, and perhaps individual customer adaptation.

3.2.1.3 Customer-perceived Value

Several of the many variations and buzzwords concerning customers and value do not capture the entire concept of value generating in the minds of the customer. Terms such as customer satisfaction and customer care are too narrowly defined. Many of these definitions do not completely undertake a customer perspective to see all the factors that influence how the customer *perceives* the value given by a certain solution. The *customer-perceived value* should not be limited to the trade-off between benefits and sacrifices in a supplier's offering, as perceived by the customer. Customers perceive value subjectively and different segments perceive different values within the same offering. Individual members in a customer organisation also perceive value differently. Consequently, different members who are involved in the

purchasing process within a customer organisation have different perceptions of a supplier's value delivery. For a supplier it is therefore necessary to identify and assess the value perception of the key persons involved in the purchasing process when assessing the customer-perceived value, collectively known as the *organisational buying behaviour*.

Apart from the influence the organisational buying behaviour has on customer-perceived value, a supplier's *position* in the minds of the customer also influences the perception of a supplier's value delivery. (Ulaga & Chacour, 2001) A methodical investigation of customer-perceived value is a strategic marketing tool that reveals a company's current positioning in a segment relative to its competitors.

Although we believe customer-perceived value is highly influenced by organisational buying behaviour and positioning, the most fundamental ingredient of the concept is *value* as it is defined in this context. Different researchers have suggested different definitions of customer-perceived value. Our definition of value is based on Monroe (1991), who defines it as "*the ratio of perceived benefits relative to perceived sacrifice*". The perceived sacrifice includes all the costs the buyer faces when making the purchase: purchase price, acquisition costs, transportation, installation, order handling, repairs and maintenance, and risk of failure or poor performance. The perceived benefits are a combination of the physical attributes, service attributes and technical support available in relation to the particular use of the product, as well as the purchase price and other indications of perceived quality.

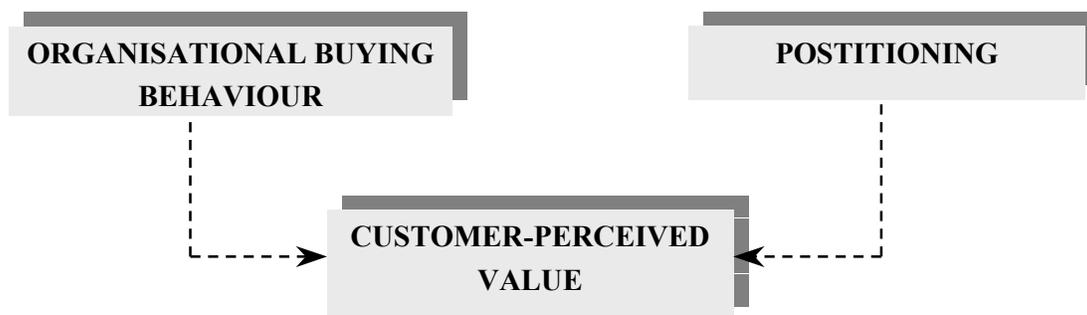


Figure 3 Customer-perceived value and its influences. Source: own

Our definition of the concept is related to the fact that we see the customer-perceived value as highly influenced by organisational buying behaviour and positioning (see Figure 3). Our definition of customer-perceived value is *“The trade-off between the multiple benefits and sacrifices of a supplier’s offering, as it is collectively perceived by the key decision makers in the customer’s organisation, taking into consideration the supplier’s position in the mind of the customer.”*

After describing the concepts of value and customer-perceived value, we move to the next part of the chapter. We discuss the two influencers on the customer-perceived value in the two following sections, starting with organisational buying behaviour.

3.2.2 ORGANISATIONAL BUYING BEHAVIOUR

Organisational buying behaviour is a major influence on the customer-perceived value of a supplier’s offering. A supplier operating in an industrial market must therefore acknowledge the need for understanding its customers’ organisational buying behaviour, collect necessary information, and analyse the information properly.

Organisational buying behaviour is complex and not easy to assess, and there are several reasons for this. First, organisational buying decisions involve people, often a group of people with different organisational buying characters. Second, people engaged in the organisational buying decisions act in rational and irrational ways. Third, organisational buying decisions often concern advanced technical products or services. Fourth, organisational buying decisions are usually time demanding, which makes the buying process complicated for the supplier to comprehend. Finally, each organisation is different from the other and this is reflected in the organisational buying behaviour. (Webster & Wind, 1972)

Today, much of the attention in industrial marketing is drawn to creating and maintaining of strong relationships between suppliers and buyers. A strong relationship often demands that the supplier is customer focused, thus possess

an understanding of the customer's needs, wants and behaviours. When the supplier has the ability to understand the customer's needs and wants, it has the knowledge to offer customised products and services. As tailored offerings have turned out to be a competitive advantage for suppliers, it has become critical to understand the behaviour of the buyers. (Tanner, 1999)

Understanding the buying behaviour of a customer is one step towards becoming more customer focused. It is stated that when a supplier has a complete comprehension of the customers' buying tactics and strategies, the company's marketing efficiency will increase. (Hill & Hillier, 1977) Understanding when, how and why the organisational buyer makes certain buying decisions is therefore of great importance. The supplier must understand the influences behind the decision and their ability to affect the decision process. (Kauffman, 1996)

To examine and better understand the theory of organisational buying behaviour, we have identified a model that will be used as a framework throughout this part. Webster and Wind's (1972) buying behaviour model is considered to be one of the most comprehensive models, covering most sources of buying behaviour influences. Webster and Wind claim that the buying behaviour is influenced by four functions: individual traits; group traits; organisational traits; and environmental traits. Within each function there are two categories of variables, task and non-task variables, which means each function takes both economical and emotional variables into consideration (Kauffman, 1996).

To get a more comprehensive and complete understanding of organisational buying behaviour, we will add other researchers' contributions to the theory. All these traits will be discussed more in detail in the following sections. After the discussion of the traits, a model is presented that visualises our conclusions. First, we start to describe the very core of the organisational buying behaviour, the industrial purchasing process, and thereafter continue with the influences of buying behaviour.

3.2.2.1 The Industrial Purchasing Process

The industrial purchasing process is about the activities that take place in a buying company from the point when a need for an industrial good is realised, until the good is acquired. The industrial purchasing process is widely utilized in the literature and there are a variety of theories, even though the theories are based on mainly the same components (Fisher, 1969; Johnston & Lewin, 1994; Robinson, Faris & Wind, 1967; Webster & Wind, 1972). According to Hill and Hillier (1977) the most widely recognised theory to solve the buying problem is the one proposed by Robinson and Faris, who presented an eight stage process:

1. The anticipation or recognition of a problem or need
2. The determination of the quality and the characteristics of the needed item
3. The specific description of the item needed
4. The search for, and qualification of, potential sources
5. The examination of the sources
6. The evaluation of proposals and the selection of suppliers
7. The establishment of an order routine
8. Performance feedback and evaluation

It should be realised that there is no “one” or “true” industrial purchasing process, as every buying situation is unique (Hill & Hillier, 1977; Kauffman, 1996; Webster & Wind, 1972). Even so, organisations go through some similar patterns in terms of buying behaviour and buying centre composition regardless of the purchase situations (Johnston & Bonoma, 1981). The process described above is more likely to fit an industrial purchase of a *new buy* or a *modified rebuy*, then a *straight rebuy*. A straight rebuy leaves out certain stages and adjusts the process in a higher degree in comparison to a new buy or a modified rebuy. The duration of the process will also vary as a consequence of the complexity of the product, the negotiations and the human interactions. (Hill & Hillier, 1977) From this discussion, Kauffman (1996) emphasises that the purchasing process itself and the product types and attributes are influencing the buying decision.

3.2.2.2 Influencers

Influences of Environmental Traits

Environmental influences are perceived to be immense, although hard to recognize and to measure. They affect the purchasing process by providing information, but at the same time putting restraints on the organisation. The organisational buying behaviour model contains of six identified influential environmental factors: physical, technological, economic, political, legal and cultural. (Webster & Wind, 1972)

The environmental factors could be filtered through different kinds of institutions and these institutional settings will differ from country to country. The environmental influences affect the purchase process in four distinctive ways. First, the factors recognize the availability of goods and services. Second, the factors realise the buying organisation's general business conditions. Third, the factors verify the norms and values that are present in the relationships. Finally, the factors affect the information the buying organisation will receive about the suppliers. It is, therefore, important for the supplying organisation to identify and analyse those institutions that influence the buying behaviour in the market segment. (Webster & Wind, 1972)

Influences of Organisational Traits

The organisational influences on the purchasing process are constrained by the organisation's financial, technological and human resources and, at the same, time governed by the organisation's goals. This function of influences is principally directed by task-related variables. Webster and Wind (1972) categorise four types of organisational variables influencing the purchasing process: organisational technology (relevant for purchasing); organisational structure (of the buying centre and the purchasing function); organisational goals and tasks (buying tasks); and organisational actors (members of the buying centre). All these variables are interrelated with each other and together they affect the individual's mind when making a decision (Webster & Wind, 1972). For suppliers, an understanding of how the variables affect the individual's mind in a buying decision is a great marketing opportunity.

Influences of Group Traits

The buying centre is the group of people within an organisation who jointly make purchasing decisions for the same organisation (Kauffman, 1996). In order to understand how the group is influencing the industrial purchasing process, the characteristics and functions of the buying centre have to be sorted out in three classifications. First, the buying centre consists of individuals with different roles. These roles have been identified to be:

- *Users* - members of the organisation who use the purchased products and services.
- *Buyers* - people with formal responsibility and authority for contracting with suppliers.
- *Influencers* - people who influence the purchasing process directly or indirectly by providing information and criteria for evaluating alternative buying actions.
- *Deciders* - those with authority to choose among alternative buying actions.
- *Gatekeepers* – people who control the flow of information into the buying centre.

Second, these individuals interact with other individuals within and outside the buying organisation. Third, occasionally the individuals in the buying centre act as a whole towards the outside. This illustrates that if suppliers want to make use of the buying centre in their marketing strategies, they have to be aware of the complexity and the composition of the organisation. (Webster & Wind, 1972)

Influences of Individual Traits

Although groups are engaged in most industrial purchasing processes, the individual is the core of the process. It is the individual behaviour that is truly the organisational buying behaviour. However, the individual could be perceived as both constrained and motivated in his/her actions. The buyer is constrained by policies and information passing through the organisation, stimulated by a compound arrangement of personal and organisational goals, and also affected by other individuals within the buying centre. The buyer's

reaction to the buying situation is a result of the individual's psychological characteristics such as motivation, cognition, personality, learning and perceived role. Decision makers also act with irrational and non-economical minds and have almost always some sort of emotional opinion about the sellers. It is, therefore, vital to understand the individual's psychological characteristics and especially his preferences and vulnerabilities. The specific individual should be the target of the supplier's marketing efforts and not the conceptual organisation. (Webster & Wind, 1972)

According to Webster and Wind (1972), the industrial purchase process is influenced by the four functions described above. However, other researchers have contributed to the theory of organisational buying behaviour and added characteristics that influence the process. These functions will be discussed below to get a more thorough and broad understanding of organisational buying behaviour theory.

Influences of Product Traits

Robinson, Faris and Wind (1967) and Seth (1973) add a number of functions that broaden the theory of organisational buying behaviour. Their theories demonstrate that the traits of products influence the industrial purchasing process. The product traits affect the purchase process by the perceived risk, type of purchase and time pressure. A decision is more likely to be delegated to one party if the uncertainty is low, if it is a repetitive buy and during time of high pressure.

Influences of Seller Traits

The same researchers have also suggested that the seller traits affect the industrial purchasing process. The buying organisation has expectations regarding the sellers and its products and services. These expectations refer to the perceived potential of alternative suppliers and brands to satisfy a number of explicit and implicit objectives in any particular buying decision (Sheth, 1973, p. 52).

Influences of Informational Traits

Seth (1973) continues and includes two more traits that affect the industrial purchasing process. The first one is the source and the type of information to which the members of the buying process are exposed. A decision maker obtains a lot of information every day and often the information is biased. The information that is directed towards the decision makers can be created by both the sellers, but also from members inside their own organisation.

Influences of Conflict Traits

The second trait presented by Seth (1973) deals with conflicts and negotiations. He states that a decision can be made either jointly or autonomously within the organisation. Making a joint decision can often lead to disagreements and if this creates a conflict it will influence the industrial purchasing process. To resolve the disagreement the decision makers can use four different methods; for example: problem solving; persuasion; bargaining; or politicking. However, according to Seth, the two latter methods are irrational and inefficient and can only damage the buying company.

Influences of Relationship Traits

The concept of organisational buying behaviour just discussed is, in our opinion, very much transaction oriented and internally driven. It views the industrial purchasing process as something static and limited to a set of framed stages. The theories above are limited to the actions and behaviour of one or a few persons in the buying organisation and ignore the social interaction with people outside the organisation. We are of the opinion that the theories do not focus on the interactions between the seller and the buyer, as well as those between other actors. We believe another trait needs to be added to the organisational buying behaviour theory, the one of *relationships*, or relationship management, which is described next.

Embracing the concept of relationships and interactions in industrial buying behaviour brings the discussion to another level. Relationship management is very much related to organisational buying behaviour and vice versa, since relationships are built on mutual value creation. An interaction of this kind

could be, although not necessarily, a buying-selling situation between two actors.

A transaction-focused company is aiming at short-term relationships and does not fully comprehend the benefits of keeping customers by building long-term relationships. Consequently, the company is not sufficiently interested in keeping existing customers and concentrates on finding new customers. In a case like this, the supplier is often only communicating one way from the company to the customers and does not consider or listen sufficiently to the customer's needs, wants and behaviours.

A more relationship oriented company focuses on the customers' needs, wants and behaviours in a long-term perspective. The relationship is based on a two-way-communication system between two actors with the objective of creating reciprocal value. An organisation with this type of focus strives towards developing a close contact with the customers, which is a prerequisite to understanding their needs, wants and behaviours. (Gordon, 1998)

Relationships are a phenomenon that is dynamic and continuous in its nature, meaning that an actor can at no time take a relationship for granted. Two actors have to base a relationship on mutual value creation and build it on trust, commitment and equity (Rosen, Bonsu, Curran & Purinton, 1998). All these factors have to be nurtured over time, or else the relationship can become damaged.

Relationship management, in contrast to the theories of organisational buying behaviour discussed above, is dependent on the interactions with people outside the organisation. The concept of relationship management does not only involve a few people within the organisation, it involves employees at all levels. Even though most people in the selling company do not directly interact with the customer, they do it indirectly by meeting the customer's requirements. If a relationship is going to be successful, everyone has to strive for the satisfaction of customer needs.

The relationship between the buyer and the seller affects and is affected by the organisational buying behaviour within the buying organisation. This means that all traits that influence the organisational buying behaviour together affect the relationship with any seller. Relationship management provides the seller with the knowledge to continuously creating new values to share with customers. For organisational buying behaviour, it means that the better relationship a seller has with his customer, the better his ability to understand the customer's purchasing process.

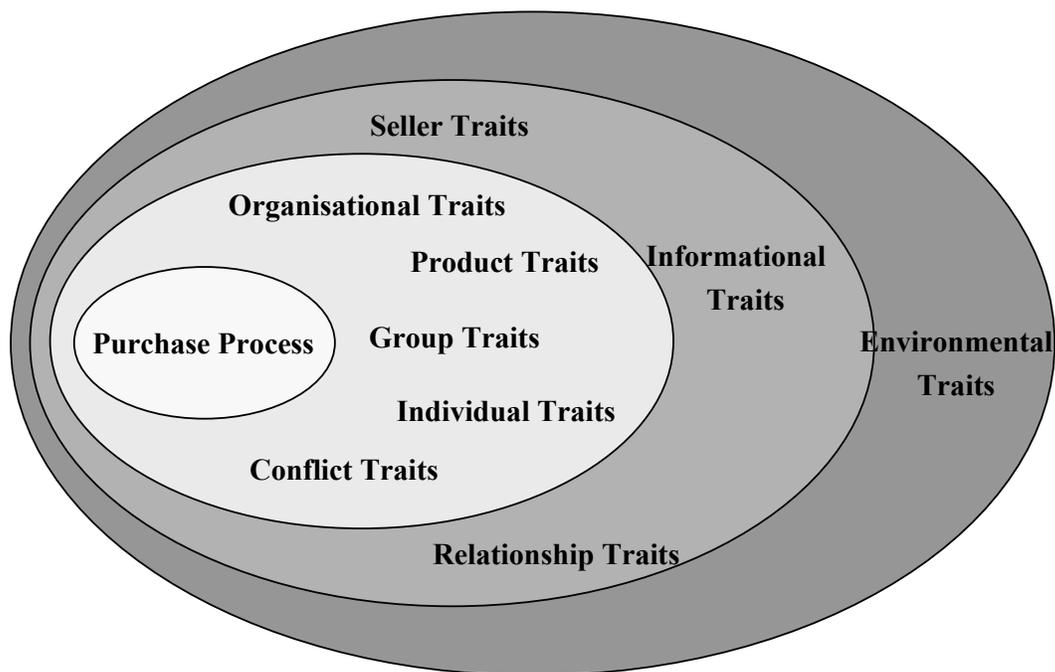


Figure 4 Organisational buying behaviour. Source: own

We summarize the discussion of organisational buying behaviour by visualising the purchase process and the factors affecting it. The relationships between the different influencing traits vary according to the theories, since the researchers do not agree which factors influence the purchase process. After reviewing the theories used, we perceive the traits to affect the purchase according to Figure 4, which illustrates the first tier influencers (organisational traits, product traits, group traits, individual traits and conflict traits), second tier influencers (seller traits, informational traits and relationship traits), and third tier influencers (environmental traits) having an effect on the purchase process. The environmental traits influence the second tier influencers and the

second tier influencers affect the first tier, which in turn shapes the purchase process. Within each tier the traits influence each other. First tier influencers can also have an effect on the second tier.

3.2.3 POSITIONING

A company needs to create a position strategy within each segment of its market and explain to customers where the company is standing in comparison with its competitors. Strategic positioning is a unique approach that combines both strategy and organisational effectiveness in a way that serves to further differentiate an organisation in its marketplace and drive success.

Positioning is “*the act of designing the company's image and value offer so that the segment's customers understand and appreciate what the company stands for in relation to its competitors*” (Kotler, 1988, p. 308). This definition states that positioning is about establishing a wanted perception in the minds of the targeted customers that is different from the competitors. Webster (1991) strongly associates positioning with the term *value proposition*, the company's distinctive way of delivering superior value to its targeted customers. The value proposition is the very reason behind why a customer chooses to do business with a particular supplier.

The terms *positioning* and *segmentation* are closely interrelated and need to be clarified. A company creates segments of its markets and within those markets the company can establish subsegments or position itself. Positioning within a segment means that the company is targeting a certain type of customers within that specific segment. Subsegmenting, on the other hand, takes the procedure further and segments the already existing segment into smaller subsegments. (Kotler, 1988) For obvious reasons segmentation and targeting must be done before positioning, as “*...positioning is in the mind of the customer/prospect and in comparison to competition*” (Webster, 1991, p. 103).

3.2.3.1 A Marketing Tool

Positioning is of importance for the company as it helps them understand why customers are buying from a certain company and force marketers to think

about their own company from a customer perspective (Stone, 1995). When the company is working with positioning, it is, at the same time, working with the company's marketing mix. As the company defines the market position, the company receives the knowledge about the marketing mix's direction. The marketing mix - price, place, product and promotion - is the classic tactical activities to reach the wanted position. Thus, a high quality position requires that a company provide the market with a high quality product, charge a high price, distribute through high quality dealers, and promote itself via high quality mediums. (Kotler, 1988) Positioning, then, may contribute to aggressiveness and flexibility in the company's marketing activities as it forces the company to become proactive in its marketing activities (Reddy & Campbell, 1993).

According to Porter (1998), positioning also determines how the activities within the company relate to each other and, therefore, create a fit of activities. This fit will develop a unique set of activities, which become difficult for competitors to imitate. A successful strategic fit will establish a competitive advantage, as well as the sustainability of that advantage.

3.2.3.2 A Communication Tool

Ries and Trout (2001), the initiators of the positioning concept, see positioning as primarily a communication strategy and not as a total marketing mix strategy. Their definition of positioning concerns less what the company does to the product or service, and more how a company positions "...*the product in the mind of the prospect*" (Ries & Trout, 2001, p. 3). Most often, existing products already have a position in the minds of the customers and it is this perception that the company should take into consideration.

The more a company understands how the minds of the customer work, the more the company will understand how positioning functions. To succeed in positioning, Trout (1996) has identified the most five important psychological elements in positioning process: *minds are limited*; *minds hate confusion*; *minds are insecure*; *minds do not change*; and *minds can lose focus*. If a company has a picture of how the minds of the customers work, it has a great

advantage in positioning itself in relation to its competitors who do not have the same understanding.

3.2.3.3 Requirements of Positioning

Whether positioning is perceived as a marketing tool or a communication tool, a company still must have an understanding of what is going on in the customer's mind, since positioning requires allocating resources towards the right hole in the customer's mind at the right time. This knowledge is a prerequisite for finding the requirements for creating an effective positioning statement. According to Myers (1996), there are three key categories of requirements. First, *uniqueness* is one of the most fundamental principles of positioning and the company has to, in the customers' minds, stand out in an important way. This is connected to the second group, *importance/desirability*, as companies must realise that their distinctiveness is important for the customer. *Believability* is the last category of requirements. A company's position has to be credible in the mind of the customer, otherwise it is of little use.

3.2.3.4 Positioning Difficulties

The discussion above can be related to the argument of positioning pitfalls. Positioning is a very crucial tool in the company's overall marketing strategy and consequently marketers must be aware of the pitfalls of positioning. Trout (1996) identified six pitfalls, which companies must bear in mind when positioning. First, a positioning concept is often very obvious, but a company's marketers perceive obvious too simple and make it more complicated than necessary. Second, today's winning positioning idea is not necessarily successful in the future. Third, some companies tend to make the positioning statement cute, when instead it often should be straight and direct. Fourth, positioning thinking should be based on activities in the market and not within the organisation. Fifth, the process of positioning must be of a long-term character and not short-term. Finally, marketers may interfere too much and cause problems for a brand. Being aware of these dangers can help a company create and sustain its positioning strategy.

A company has only three strategy options in challenging a competitor in the same segment according to Ries and Trout (2001). The company can *reinforce and influence its position* in the minds of the customers. The company can *reposition* itself and look for an undiscovered position in the segment with a satisfactory number of potential customers. The company can *attack the competitors by deposition or reposition them in the minds of the customers*. Kotler (1988) mentions a fourth option, which is called the '*exclusive club strategy*'. A company that cannot reach the number one position in a segment may entitle themselves and the leading competitors as the best group.

A company can have different kinds of problems in its position in the minds of the customers, such as losing focus or change-related problems. These problems can appear due to several reasons. The environment is affected by the fast speed of technology changes, the rapid and unpredictable changing in customer attitudes, the increase in competition within the global economy and the increased competition among creative executives. A way of dealing with these problem-causing factors could be to reposition the company.

In some cases, a company might find it rather easy to position itself in a certain segment. This has to do with how the company is positioned in all its segments. A company that is positioned in a particular part of its segments will most likely go for the same position in new segments if beneficiary. However, it is not unusual that two or more companies commit to the same position within a segment. To solve this situation the companies try to further differentiate themselves from each other. Each company needs to create a distinctive composition of competitive advantages that attract a group of customers within the segment in order to be successful. (Kotler, 1988)

A defined position is a necessary but not sufficient factor for a company's strategic success (Reddy & Campbell, 1993; Webster, 1991). Even if the company has a well-defined position, there is no guarantee of success because an improper position may not match with other strategic aspects and a proper position is of no value unless it is backed up by the company's activities. It can be important for a company to have control of the positioning given that

positioning may happen without the company knowing about it. Positioning can be assigned by the customers, or in the worst case, by the competitors. (Reddy & Campbell, 1993)

3.3 SUMMARY OF THE THEORETICAL FRAMEWORK

Customer-perceived value is a concept based on value and influenced by organisational buying behaviour and positioning. The principle of the customer-perceived value concept is to identify how value is generated in the different customer segments and arrange its marketing and sales activities according to this understanding. In order to do so, the company can provide the individual customer with value generating offerings.

Value is a concept that has been used in several areas than marketing and can therefore be defined in numerous ways. We have chosen to view value from a customer's perspective, meaning how suppliers create value for their customers and how customers perceive superior value in a supplier's offering. We therefore define value as the ratio between perceived benefits in relation to perceived sacrifices. Value is not generated by the supplier, it can only be created by the customer when using the purchased product or service, which in turn encourages the customer to purchase customised packages and solutions.

The organisational buying behaviour is a wide concept and has been a rather well written theory with a diversity of opinions. The base of the organisational buying behaviour, the purchase process, is on the other hand agreed upon. It consists of an eight-step process starting from the recognition of a need to the offering's performance feedback. The issue that the researchers cannot agree upon are the traits that influence the purchasing process. We have recognised nine influencers: environmental traits, organisational traits, group traits, individual traits, product traits, seller traits, informational traits, conflict traits and relationship traits.

Positioning is about creating a company's image and value offer in a way that the customers in specific segment understand its standpoint compared to competition, which can be the reason why the customer chooses a certain supplier.

Knowing its current and wanted position, a company can use this knowledge in creating its marketing and sales activities, i.e. we perceive positioning to be a marketing tool. A position has to include three requirements: uniqueness, importance/desirability and believability, in order to be successful.

After discussing the theoretical framework, we enter the empirical study of the thesis in the next chapter. The chapter describes the data we have collected throughout the study.

4 EMPIRICAL EVIDENCE

We start this chapter by presenting the case company, Volvo CE and its current marketing and sales organisation and activities, especially in the recycling/waste management segment. To give the reader a better understanding, we describe the characteristics of the waste management industry and evaluate the existing movements and trends. Following that, we map the value creation, the organisational buying behaviour and the case company's position in the recycling/waste management segment.

4.1 VOLVO CE

Volvo CE, a member of the Volvo Group, is the world's fourth largest company in the construction equipment industry with a market share of about six percent. The largest actors in the construction equipment industry are Caterpillar, with an estimated market share of 29 percent, Komatsu (16 percent), and Case New Holland (8 percent).

The company's headquarters are located in Brussels, Belgium. Its product line consists of over 130 models of wheel loaders, articulated haulers, excavators, motor graders and compact machines (compact excavators and compact wheel loaders).

In the year 2000, Volvo CE sold more than 21,000 machines and net sales amounted to about 20 billion SEK. Volvo CE's largest market is Western Europe, which accounted for 51 percent of the sales, while North America accounted for nearly 30 percent of the sales and Asia together with the rest of the world for the remaining 19 percent.

Volvo CE's manufacturing companies, responsible for manufacturing and development, of products and components, are organized into six different product companies: Volvo Articulated Haulers AB; Volvo Wheel Loaders AB; Volvo CE Components AB; Compact Equipment; Volvo CE Korea Ltd.; and Volvo CE Cabs AB. The manufacturing is spread on four continents in Canada, Germany, France, South Korea, Sweden, and the United States

The development and manufacturing of wheel loaders is located in Eskilstuna, Sweden. The wheel loaders are also manufactured in Asheville, the United States, and in Paderneiras, Brazil. Volvo CE's excavators are, after Volvo CE's acquisition of the Samsung's excavator company, developed and manufactured in Changwon, South Korea. Articulated haulers are developed and manufactured in Braås, Sweden, and also manufactured in Asheville, Paderneiras and Changwon. Motor graders are developed and manufactured in Goderich, Canada. In Eskilstuna, Volvo CE Components AB has its headquarters and a production plant, while the manufacturing of cab systems, hydraulic tanks, fuel tanks and sheet metal components are situated in Hallsberg, Sweden.

4.1.1 MAPPING VOLVO CE'S MARKETING AND SALES ACTIVITIES

The product companies are individually responsible for the development and manufacturing of their specific line of products. Apart from the product companies, Volvo CE has sales and marketing companies who are responsible for marketing and sales in their specific geographical markets. There are three sales companies, Region Europe, Region NAFTA and Region International. Each sales company consists of one or more regional sales companies, which is illustrated in Table 3.

Region Europe:	Volvo CE Europe Ltd, Volvo CE Europe GmbH, Volvo CE Europe SA, Volvo CE Europe AB
Region NAFTA:	Volvo CE North America, Inc.
Region International:	Volvo CE Australia Pty, Ltd., Volvo CE South America, Volvo CE East Asia (Pte) Ltd.

Table 3. Sales companies and regional sales companies. Source: Volvo CE

Volvo CE markets its products in more than one hundred countries. The company is selling its products and services mainly via a network of independent dealers, but also through company owned dealerships or directly to customers. The latter is sometimes the case in small markets, where sales are too small to justify the setting up of a dealer. In those markets, sales people

work directly from one of the three sales companies Region Europe, Region NAFTA and Region International. The United Kingdom is one of the countries where Volvo CE works with a fully owned dealership instead of an independent dealer.

To further support sales, Volvo CE has worldwide distribution and customer support. Distribution and customer support is an area of growing importance for sales and has been a sort of an Achilles' heel for Volvo CE – an area with a lot of opportunities to improve. The distribution and customer support assist the sales channels in certain markets – the dealer or the sales company - with products, services and support. It is divided into seven areas: Africa, Asia/Oceania, Europe, Central America, Middle America, North America, and South America.

Another support for sales is the training centres. Sales people, product specialists and mechanics are trained at Volvo Training Centres in a number of locations in various parts of the world.

The company is continuously working to improve its dealer network and to strengthen the relationship with its dealers. The company is normally working with one dealer who is responsible for sales in the whole country and is an exclusive Volvo CE dealer. This is the case in Sweden, where the Swedish dealer Swecon is the exclusive dealer of Volvo CE products. That means that Volvo CE does not sell through dealers other than the exclusive Volvo CE dealer, and the dealer does not sell other competing brands. There is a trend towards internationalisation of dealers – when a dealer in one country acquires a dealer in another country and takes over its business – but the trend is in its infancy still. It is expected to become more common in the future with larger, more powerful dealers with dealerships in several countries. In smaller countries, such as Belgium and the Netherlands, the sales are already run by one dealer today. However, in countries of substantial size, Volvo CE sometimes prefer to have more than one Volvo CE dealer, if one dealer is not strong enough to sufficiently cover the entire market within the country.

In the markets of medium and large size, the dealers, with whom Volvo CE is working with are normally carrying Volvo CE products exclusively, and this is what Volvo CE is striving for. If the dealer is an exclusive Volvo CE dealer, it is easier to develop relationships and work closer with the dealer. Also, Volvo CE knows that it has a 100 percent share-of-mind with those dealers. In smaller markets, the company is forced to work with dealers who carry competitors' products or other Volvo Group products, in order for the dealer to reach a substantial sales volume.

The time out in the field with sales people and with customers during our field studies in Sweden and the UK gave us a good understanding of the practical marketing and sales activities in these two countries. Even though the structural organisation of the sales differs substantially – Volvo CE owns the dealership in the UK while the dealership in Sweden is independent – there are more similarities than differences in the marketing and sales activities in the two countries.

The sales people in the two countries work very similarly. They are responsible for creating and closing deals and building and nurturing relationships with all types of customers in their geographical area. Therefore, the sales people have a great deal of knowledge about the customers in their specific geographical area. They know what business the customers are in, what construction equipment they are using, what products and services they buy from Volvo CE and from the competitors. They have a good perception of Volvo CE's position in each segment relative to its competitors.

An observation we made during our time out in the field with sales people was that, in a way, today the sales people are already working with a market segmentation approach, or at least they have the knowledge to do it. This in spite of the fact that they are working in geographically divided areas covering all customers in their area. The sales people adapt their approach and bundle the offerings of Volvo CE's portfolio of products and services according to their knowledge about the customer and its business. Figure 5 illustrates how the sales people are working and how they are supported by the different product companies and not by a customer segmentation focused organisation.

The sales person knows the customer needs, since he or she has a great deal of knowledge about the customer. The sales person thus knows which of a customer's total needs that Volvo CE can satisfy with the products and services available in the company's product/service portfolio. The sales person is, therefore, able to bundle the offering according to the customer needs. This is practically done by bringing product catalogues and brochures that he knows can satisfy a need for a certain customer during a visit. The sales person, with help from the dealer organisation, asks Volvo CE's different product companies for prices, delivery times and other information concerning products that can satisfy the customer's needs.

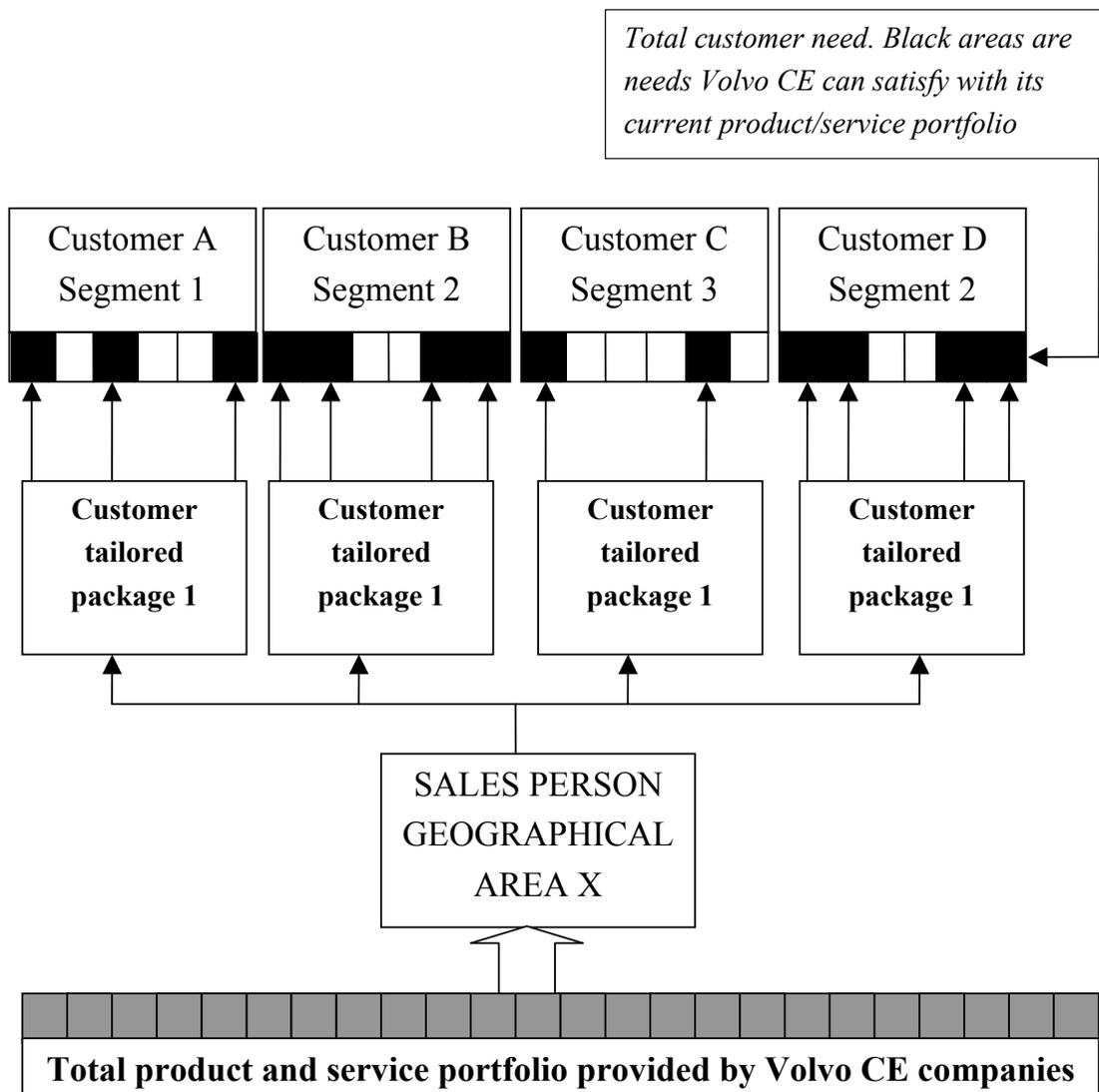


Figure 5 Illustration of sales people's current sales approach. Source: own

Today the sales people's great knowledge about a specific segment's needs is not taken care of through a segmentation approach in Volvo CE. Since Volvo CE is organised into product companies, the feedback – when that is collected at all – goes to the different product companies, who are of course divided by products, or to the sales companies, who are geographically divided. Since each product company is responsible for the product development of its specific products, market information is collected and analysed by each product company.

In the two markets we have looked specifically at, the UK and Sweden, we observed a slight difference in the way the sales people are working. In the UK, Volvo CE is doing well but is still rather far behind the market leader Caterpillar. In Sweden, being the historical home country of Volvo CE, Volvo CE is the undisputed market leader. In Sweden, Volvo CE has only recently begun to face harder competition from global competitors such as Caterpillar and Komatsu. The observation we made was that the Volvo CE sales people in the UK seemed extremely aware of the total needs of the customers in their geographical area and they know exactly when somebody is about to buy a new machine, what that customer is looking for, which supplier the customer previously has bought from, and who probably gets the deal. During the time we spent with sales people in the UK, we had several concrete examples that proved these observations. As an example, we passed several construction sites, and the sales people knew, in detail, what kind of construction equipment the customer bought and from which supplier. The UK is a rather normal market situation for Volvo CE, where they are facing fierce competition from all other major actors in the industry. Here, customers seldom have the same historical bonds to Volvo CE; neither do they have the extensive knowledge about the company and its products as customers in Sweden.

In Sweden, Volvo CE has had a rather secure customer base, which always has bought Volvo products. They are often satisfied with the products and have a close relationship with the sales people with no intention to change supplier. Being in this fortunate situation in Sweden might explain the observations we made. The sales people in the UK seem to us to have a slightly greater awareness about customers' needs in their geographical areas compared to sales

people in Sweden. Some of the people we interviewed at Volvo CE in Sweden explained their concern about the Swedish sales people being sometimes too much of ‘order clerks’, meaning that some sales demand little input from the sales people, and there is a danger that some sales are more or less given to the sales people. As a result, there is a risk that the sales people could be less ‘on the edge’ in their sales approach, leaving an opening for the competitors. This is very true, according to the people we interviewed at Swecon, due to two things. First, competition is getting fiercer and competitors more aggressive on Volvo CE’s home market. Secondly, customers are being less patriotic and faithful to Volvo CE’s products if they know they can get a product of the same or close to the same quality for a better price. According to the persons at Swecon, competitors are often willing to go down in price for a new customer in an initial buy, to make the customer break its pattern of buying Volvo CE machines, and thereby, in a later stage, to be able to sell more products.

After reviewing Volvo CE and the marketing and sales activities within the organisation, we move into the waste management industry. To get a better understanding, we describe the industry and the different drivers and trends in the following section.

4.2 WASTE MANAGEMENT INDUSTRY

Defining industries is generally problematic, in terms of geographical and market boundaries. According to Grant (1998), the key is to identify the relevant market. The waste management industry involves “*activities that deal with waste before and after it is produced including its minimization, transfer, storing, separation, recovering, recycling and final disposal*”¹. The waste includes all kinds of materials, such as: metals, paper, chemicals, wood, glass, plastic, and water.

The major waste sources in Europe come from areas such as agriculture, building construction, industry, mining and municipal. Agricultural waste is the largest in terms of quantity, while industrial waste is the most significant in

¹ www.encarta.com, September 29, 2001

terms of its environmental impact.² The predominant waste management methods are land filling, recycling and incineration.

This industry has boomed the last decades as the world's population continues to grow and the urbanization of the population is expected to almost double, reaching over 4 billion in 2020.³ As societies develop and get richer and more productive, the demand for goods increases. This is also leads to decreasing product life cycles, which increase waste from more production and end-of-life products.

Between 1990 and 1995, the total amount of waste generated in Europe grew by about 10 percent. Today, around 2 000 million tonnes of waste is generated in Europe each year.⁴ These figures illustrates that the importance of waste handling will increase and consequently create opportunities within the industry.

4.2.1 INDUSTRY SENSITIVITY

The waste management industry is relatively insensitive to economical cycles, though some waste sources may be more sensitive than others. This means that the industry is rather stable and not very dependent on the ups and downs in the global and regional economies. However, in certain markets the waste management activities can be restructured as a result of the economic situation. For example, recycling may become more important when the virgin raw material's price sensitivity increases.

4.2.2 INDUSTRY DRIVERS

A Country's economic situation and structure tends to drive the source of waste. Europe is a good example of this, where Western Europe generates a greater share of industrial and municipal waste than countries in Central and Eastern Europe. The major source of waste in the Central and Eastern European countries is mining. As a result, waste management handling varies in regions and countries due to the economic development.

² Directorate-General Environment, Nuclear Safety and Civil Protection, 1999

³ Organisation for Economic Co-operation and Development, 2001

⁴ Directorate-General Environment, Nuclear Safety and Civil Protection, 1999

A factor that heavily affects the waste management industry is the laws and regulations present at supranational, national and local levels. The regulations and laws at national and local level may differ considerably between and within countries. The economic development of the country and the development of the legislation in this area seem to coincide. Developed countries often have stricter legislation regarding waste management than developing countries.

Public environmental awareness is a driver that has a strong influence on the waste management industry. Countries with a strong environmental consciousness - such as Germany, the Netherlands and the Scandinavian countries - have developed sophisticated methods for handling waste management. These types of countries are also very keen on further developing the waste handling within and outside its borders.

A prerequisite for the development of this industry is the availability of technology and knowledge. Often, legislation is the engine for innovation and business opportunities. New technologies are changing the way waste management is handled, which may transform the waste management industry within a country or region. An alteration can create new ways of doing business, but also limit more traditional ways.

4.2.3 THE EUROPEAN UNION

The European Union is an important driver in the member countries' waste handling sector. Thirty years of environment policy has led to a comprehensive system of environmental controls within the European Union. Recently, the *Sixth Environmental Action Programme* was presented, which indicates the strategic direction of the Commission's environmental policy over the following decade.

The Sixth Environmental Action Programme has identified four priority areas, one of which concerns natural resources and waste. The objective of the programme regarding this area is to reduce the quantity of waste by a general strategy to improve waste initiatives, increase the resource efficiency, and change the consumption patterns to become more sustainable. The programme also shows that the Commission has set high targets; such as, reducing the

volume of waste going to final disposal by around 20 percent by 2010 and 50 percent by 2050 in comparison to year 2000.

This will change the waste management industry for countries within the European Community as well as within potential members. The legislation will put further pressure on waste prevention, waste recovery and waste disposal. As a result, the industry within the Community will become more focused on separating, recovering and recycling the waste and the restrictions for land filling and incineration facilities will be tougher. This will, of course, affect the actors in this market, as well as suppliers.⁵

4.2.4 INDUSTRY TRENDS

As mentioned, the European Union is greatly contributing to the movements within the European market. The industry is moving towards a recycling focus, which is restructuring the market and the actors. A large number of actors have had to invest in new knowledge and technologies to stay alive in this developing industry. Even though the Commission is trying to encourage handling waste where it is generated, facilities may become specialists of certain waste due to competence, or technological or legal factors.

This section has given us an understanding of the waste management industry, which is useful for the next section. The following part maps how value is created in the minds of the customers.

4.3 MAPPING OF VALUE CREATION

The perceived value is the customer's perception of what is considered to be important when purchasing a new product, taking into account the perceived benefits and perceived sacrifices of buying a certain supplier's products or services. The mapping of the recycling/waste management segment's buyers' perception of benefits and sacrifices is structured in four areas: product factors, soft factors, emotional factors and total ownership costs. The mapping of value creation is based on customer interviews, the survey, and customer visits.

⁵ European Commission, 2001

4.3.1 PRODUCT FACTORS

The product factors are those factors that are perceived to create the most value for the buyer concerning the product itself. Product factors are very important in the recycling/waste management industry, as the usage and importance of the products varies considerably. Even though organisations are different, there are certain patterns regarding what product factors that generate most value for customers.

According to our customer interviews, the two most important factors are the *productivity* and the *durability* of the product, which has to do with the products ability to perform. This was also supported by the survey, where four out of nine customers chose productivity to be the most important factor, while two customers selected product durability. Two customers chose these factors to be equally important. This indicates that productivity and product durability are the product related factors that create the most value for the customer.

These two factors play very different roles in the waste management organisations. In organisations where the machines are active and play an important role in the actual production chain, organisations cannot afford to have a broken product during a long period of time, according to Volvo CE customers. For instance, a facility that receives and stores waste for further transportation must have machines that collect the waste and transport it away or put it into a container. If a machine breaks down it will not take long before the facility is overloaded with waste that cannot be moved. In this case, the machines are a very vital part of the production chain; therefore, the machines must be productive and durable. In other words “*it has to work or we [the customer] lose a whole lot of money*” (Ian Edwards, October 19, 2001). In an organisation where the machines do not play such an important role in the production chain, other factors are more important.

The customers must be able to get the products with *features and applications* that fit their specific needs. This is an important element in this industry. As the industry is moving towards a more diverse set of activities, the machines must be able to follow the trend. Our observations at customer visits revealed that a machine is not efficient in the waste management industry if it can only be used

for one type of activity. A waste handling machine may be used in many different ways and must, therefore, be transformable to fit diverse activities.

The *operator's comfort and safety* is another factor that is considered to be a priority among the organisations. The survey revealed that decision makers do consider these factors. Eight out of nine customers state that operator's comfort is a factor taken into consideration when buying a product, even though its importance differs among the answers. The safety factor is declared by seven out of the nine customers to be considered in a purchase decision. The operator may be the decision maker, especially in smaller organisations. When this is the case, the decision maker is very concerned about the comfort and the safety of the machine.

An issue that has become a factor that more and more generate value for organisations is the *environmental friendliness* of the machine, especially in the Swedish market. The survey uncovered differences between customers in Sweden and the United Kingdom. Two out of three British customers did not consider the environment in a purchase decision and the one customer who did think about it did not see it as a very important factor. During our interviews, we also felt a greater concern about the environmental friendliness of the machines in Sweden compared to the UK. The Swedish customers showed a different point of view. All Swedish customers had environment as a consideration when buying a new product and also as an important factor in the survey.

The last factor is the machine's *ease of use*. The machine must be easy to manoeuvre in order to facilitate the operator. According to a customer, a machine that is uncomplicated to operate is more efficient as it saves time and money.

4.3.2 SOFT FACTORS

The soft factors are those factors that are perceived to create value for the buyer concerning activities around the actual product. For many organisations, the soft factors in the waste management industry are as important as the product factors.

The most vital soft factor is the *product service* suppliers can offer the waste management organisations. This has to do with the earlier discussion regarding the cost of having a non-functional machine and how that can affect the entire production chain. An organisation therefore needs *quick service and response*. The *maintenance* of a machine is another aspect essential for the organisations buying the products. Maintenance prevents machines from breaking down and makes them last longer and operate more efficiently.

Technical support is often a priority for waste management organisations. At most time, the organisations have the knowledge to deal with simple technological features on the machine. However, machines are getting more and more complicated, which requires support from outside the waste management organisation.

Products and spare parts must have a *fast delivery time* and the agreed date of delivery must be met. A waste management organisation can plan for certain activities or assignments based on the delivery of a product. If the machines do not show up on the decided date and time, it can turn out to be costly for the organisation. Another central aspect in the industry is the availability of *financial and warranty packages*. Purchasing a machine from the construction equipment industry is, for most organisations, a large investment.

As mentioned earlier, it is central for most waste organisations to have the machines running as much as possible. A prerequisite for this is that there is an *availability of spare parts*. Our interviews and survey show that several customers who consider product durability to be important, consider spare parts availability to be important. When a machine is not functional, it generates nothing other than costs and if the broken part is not available the organisation will lose money.

4.3.3 EMOTIONAL FACTORS

The emotional factors derive from the buyers' emotional perception of the supplying company. Depending on the person, these factors can be very strong and an important issue when selecting the company. Emotional factors that are

deeply embedded in a buyer's mind are hard to change, but at the same time extremely fragile if not taken care of.

The *personal relationship* with the supplying company, and to some extent also with the specific salespeople, is a factor that in certain moments is essential. A waste management organisation wants to feel important and treated as good as or better than other organisations. One aspect of this feeling comes from the contact with a person from the supplying company. People in an organisation want to have the ability to communicate with a single representative person.

The *brand* of the product or the image and *corporate identity* contribute to the feeling of security and trust, which is needed in a large investment. Earlier experiences from a certain brand remain in the minds of the organisations. Due to the product's importance of the waste handling, organisations in the waste management industry must know what kind of product and support they will receive.

4.3.4 PRICE AND TOTAL OWNERSHIP COSTS

The price or the cost of a product from a construction equipment company is an essential aspect for a waste management organisation. For more or less all organisations, the purchase of construction equipment is a large investment and, therefore, an important decision. Buyers in this industry are still focusing to a large extent on the purchasing price when selecting the supplier of equipment.

However, there has been and still is a movement in the industry away from being focused on the purchasing price, towards a focus on *total ownership costs*. The total ownership costs include more factors than just the purchasing price such as maintenance, resale price, fuel efficiency and all other costs that appear during the period of the possession. Organisations have realised that the cheapest machine does not have to be the machine with the lowest purchasing price. Since the machine is used in the organisation's activities during several years many additional costs will be included.

It is important for the suppliers in the recycling/waste management segment to understand the relationship between the total ownership costs and the product/soft factors when the customers decide supplier. When purchasing a product, these organisations consider the quality of the product and the soft factors to a greater extent than the total ownership costs. This is a consequence of the losses the organisations can suffer when a machine breaks down. As long as the total ownership costs do not exceed the costs of having a non-functional machine, which is seldom the case, the organisation will prioritise the quality of the product and the service.

After describing how value is created in the recycling/waste management segment, we enter the following section regarding the customers' buying behaviour in the same segment.

4.4 MAPPING OF ORGANISATIONAL BUYING BEHAVIOUR

4.4.1 INDUSTRY ACTORS

The type of actors operating in the waste management industry varies within and between countries. Actors operating with products from the construction equipment industry can be divided by looking at three characteristics:

- Ownership
- Size
- Type of waste handling

4.4.1.1 Ownership

Waste management organisations have different kinds of ownership characteristics. The share of public versus private waste management organisations differs substantially among member states within the European Union. According to Volvo CE's management, Sweden has a larger portion of public organisations in the industry than the United Kingdom, which is mostly a result of political and economical factors. Local governmental authorities often administer the public organisations. Another common element in the industry is that local authorities are subcontracting the waste handling to private companies. Governmental authorities can also control private

companies; for example, when a number of municipalities together create a private company.

4.4.1.2 Size

Waste management organisations also differ in terms of size. As in most industries, both very large and very small organisations exist. Small organisations tend to be public and often restricted within an area such as a municipality. Small organisations can also be specialised private companies. Larger organisations are often private and operate over large areas.

4.4.1.3 Type of Waste Handling

The definition of waste management illustrates that the industry is complex with a vast variety of activities managing very different materials. This creates a variety of organisations, where some organisations concentrate on a specific activity and other focus on several activities. However, according to sales people, the combinations are numerous. Small public organisations are often managing several activities and materials. Larger companies tend to concentrate on a limited amount of materials and activities.

4.4.2 ACTORS' PURCHASE PROCESS

The sales people we met and interviewed state that the purchase process in the organisations operating in the waste management industry varies greatly as the variations between the organisations are numerous. Nevertheless, there are similarities of the purchase process depending on the type of organisation. In other words, organisations of the same type have similar buying characteristics. This means that, for example, public organisations tend to buy in a similar way, while private companies also tend to buy in a similar way that is different when compared to public companies. This generalisation should, however, not be viewed without taking the size and type of waste handled into consideration.

4.4.2.1 Public Organisations

A public and a private organisation's formal way of purchasing products from the construction equipment industry often differ in many ways. The public organisations in the waste management industry are strictly controlled by governmental regulations concerning the public procurement process. A public

customer explained during an interview that the process is both complicated and time-consuming for the organisation. The recognition of a need for a new product is often predetermined, since the actor operates a product for a limited period of time for economical reasons.

The buying process in a public waste management organisation often follows a certain pattern. During a customer visit, a public customer explained its formal purchase process. The decision makers in the organisation decides what kind of product they need based on what kind of handling it is supposed to do. The next step involves the product and service requirements that the supplier has to meet. Depending on what the product is used for, the organisation sets up certain requirements of applications and service demands.

When the details are decided upon, the organisation is obliged to announce the procurement. After a certain period of time the bids are collected and the organisation evaluates the different offerings. The regulations regarding public procurement require that the organisation select the bid that fulfils the requirements at lowest price. When the selection is definite, the organisation and the supplier start cooperating and create procedures between them. This formal purchase process for public procurement is constant for all types of public organisations in this industry.

However, during the interview we soon understood that there is an informal purchase process within public waste management organisations as well. Often the customer has already prior to the actual announcement of the public procurement decided what type of machine, applications, and service contracts is needed. The organisation can thereafter direct the requirements to fit the wanted supplier.

4.4.2.2 Private Organisations

According to the sales people we met, the purchase process procedure for private organisations is less controlled by regulations compared to public organisation. Private organisations recognise the need to purchase a new product in the same way public organisations do. Often, they buy a new machine after a predetermined period of time for economic reasons. However,

some private organisations do not recognise the need of a new product until the products reach their end-of-life.

To explain the purchase process in a private waste management organisation we illustrate a private customer's general process. To determine what kind of product is needed, the organisation has to consider what kind of work and activities the product should do. After deciding what kind of product to buy, it is often realised that it requires a set of applications. When the organisation has determined the product it is looking for, the search for a supplier starts. After negotiating with all interesting suppliers' bids, the organisation selects a winner. The organisation and the supplier then develop a relationship for the practical aspects.

The purchase process will look differently if the purchase is a straight rebuy, a modified buy or a new buy. A straight rebuy can more or less become a negotiation process between the organisation and a particular supplier. A straight rebuy is often the case when the organisation has made up its mind and has already selected a supplier before the initial stage of the purchase process.

An organisation that has decided to buy a new product and already selected a supplier is conducting a dissimilar purchase process. The process becomes shorter in certain aspects as the organisation knows what kind of product it wants and, more importantly, which supplier it wants. There will, as in other purchase processes, be a bidding procedure, but the intention of it is slightly different. The bidding process in a straight rebuy is an element to put pressure on the selected supplier. If a competing supplier is not offering a better deal, the organisation will purchase from the selected supplier. Often the organisation has an existing order routine with the supplier from previous purchases.

4.4.3 PURCHASE PROCESS INFLUENCERS

The purchasing process is very much influenced by factors outside and inside the buying organisation. This is applied to both public and private organisations. These external and internal factors affect the purchase process in different ways and not to the same extent.

4.4.3.1 External Influencers

The external influencers affect the purchasing process from outside the organisation. According to both customers and Volvo CE, one of the most influential external factors is the numerous laws and regulations existing in the waste management industry. The organisations' businesses are exposed to heavy regulations that are changing rapidly. This means that their businesses are also changing in parallel with the altering laws. As their businesses are shifting, new products or applications may be required.

According to Marco Onida at the Environment Directorate-General, the quick development of laws and regulations is affecting the products used, which may cause shorter intervals between product replacements. Instead of having a product for a decade or more, the development requires that the organisation changes products much faster; today often around every fourth year. To illustrate, a dealer explained that a municipality that is subcontracting the waste handling might require that the subcontractor have the most environmentally friendly machines on the market. This means that if the subcontractors want to be included in the bidding process, they have to have the latest products.

Public opinion, regarding the organisations operating in the waste management industry, states that they should be environmentally aware. People expect that the organisations are acting and using environmentally friendly machines. This attitude strongly influences organisations, especially public organisations.

A more direct influencer from outside the company is the suppliers and the information about them. During our customer visits we saw how the sales people number one objective, of course, is to affect the customers' purchase process by promoting their company and products. The sales people want to create a relationship with the customer and to build mutual trust and commitment. The people involved in the customer's purchasing process are also, to some extent, exposed to commercial information from the suppliers.

The relationship between the buyer and the supplier greatly influences the purchase process. Our observations during customer visits revealed that relationships could be critical for the buying process. A good relationship can

contribute to a less complex and framed purchase process steps. One customer explained to us that Volvo CE and their representatives have always treated them well. The customer would not stop buying Volvo CE's products unless something drastic happens, such as a loss of trust and commitment.

During customer visits we felt that word-of-mouth information from other waste management organisations are another influencer from outside the organisation. Organisations have a lot of information about other waste management organisations and their different experiences with machines. In many ways, organisations have contact with each other and this is an opportunity to honour or dishonour a supplier or product. Rumours also spread quickly out in the field and contribute to influence decision makers.

4.4.3.2 Internal Influencers

The individual who is deciding in the purchase process is an important factor. The interviews revealed that decision makers usually have a strong opinion about the supplier and its products. Even though the decision maker has not been exposed to the supplier before, he often has an opinion influenced by others. Often the opinion is deeply rooted in the person's mind and the supplier that is preferred has a huge advantage in comparison to the competing suppliers. A person's attitude towards a supplier is not solely based on the products and services, but also on the suppliers' representatives, as became very obvious to us during our customer visits. If the decision maker's personality does not match with the salesperson's personality it could create a negative view of that supplier and its products.

The decision maker in the waste management organisation can be either one person or a group of people according to a Volvo CE dealer representative. This depends on the organisation's size and characteristics. Private organisations tend to have fewer decision makers compared with public organisations. For instance, the owner in a small private organisation can be the same person as the operator, meaning that he has all the decision making power. Public organisations, on the other hand, usually have a group or board of decision makers. The purchase has to go through this group of people to get approved. However, that does not mean that the board have all the power to

select the supplier. According to the customers interviewed, other employees in the organisation, such as the operators or the foremen, can act as advisors for the selection and indirectly become decision makers.

The operators in Sweden and the United Kingdom tend to have an important role in the selection of suppliers and products. According to the Volvo CE people we have met, this is due to cultural factors and the economical awareness in these countries. The operator's strong influence on the buying decision became evident during the conversations with different customers. Firstly, the machine is the operator's working place and the decision makers often take his opinion into consideration. Secondly, if the operator is not satisfied with the machine it can become very expensive for the organisation. An unsatisfied operator may not manoeuvre the machine in an optimal way, which can be costly for the organisation in terms of additional fuel and service.

The organisation's goals and economic situation are either restraining or encouraging the decision maker in the purchasing process. According to a customer, an organisation with a tight budget forces the decision maker to select the most inexpensive alternative. It could also be the other way around and that the financial situation is rather good and the decision maker has no or little restrains from this side.

The last section of this chapter maps how Volvo CE is positioned in the recycling/waste management segment. We get an understanding of where Volvo CE is positioned today and where it wants to be positioned in the future.

4.5 MAPPING OF VOLVO CE'S POSITIONING

Positioning – the act of designing the company's image and value offer so that the segment's customers understand and appreciate where the company stands for in relation to its competitors – should be investigated from two viewpoints: where the company *wants* to be and where the company *is positioned today*. Volvo CE's strived for position in the industry is found by looking at what is currently happening in the company in terms of ongoing strategic projects and strategic models. Volvo CE's current positioning in the recycling/waste management segment in the minds of the customers is based upon interviews

with customers, as well as with Volvo CE personnel, and internal Volvo CE material.

4.5.1 VOLVO CE'S STRIVED POSITION

In 1995, Volvo CE, together with a large international management consultancy firm, conducted a study, which led to a long-term strategy with certain long-term objectives. Among them, the objectives were “*to be the third largest actor on the market, “to have a customer and segment focus”, and “to have a full line of products, both hard and soft”*”. As Volvo in year 2001 made a strategic audit of the '95 study, the audit revealed that some of the initiatives that were started were successfully implemented and the objectives were met. Concerning the objective “*to have a customer and segment focus*”, the audit showed that “*segment focus [was] not implemented; customer satisfaction scores [were] declining*”.

4.5.1.1 The Segmentation Projects

In the spring of 2001, the results of the *Market Segmentation and Product Planning Project* - a project made by Volvo CE together with the consultancy firm Accenture - were presented. The result of the project revealed that the years after 1995, especially 1999-2001, were a period of growing gaps between targets and results for Volvo CE, caused by increased competition, a slowdown in sales both in Europe and the US, slow growth in excavators, slow development in customer support and soft offerings, and a low return on high R&D investments. The operating margin had declined steadily since 1995, from an operating margin of 12.3 percent in 1995, to 8 percent in 2000. Volvo CE saw itself as in the rather risky position of being “caught in the middle” between the global market leaders (Komatsu and Caterpillar) and the niche players, who were all in a better position to achieve satisfactory operating margins. Volvo CE wanted to move “*from a regional product-focused niche player to a global customer focused broad-based major player*”, but had not fully achieved to do so between 1995 and 2001. Volvo CE's aim to become a global customer focused broad-based major player is in line with the Volvo Groups' mission statement, where the group states that it “*creates value for [its] customers...in selected segments*”.

Within the Market Segmentation and Product Planning project, a segmentation was made of all Volvo CE's customers. The segmentation was based upon internal interviews and questionnaires. The market was divided into twelve segments:

- Building material handling
- Wood handling
- Recycling/waste management
- Extraction
- Civil engineering/heavy construction
- Piping/private utilities
- Site preparation
- Building
- Rental
- Agriculture
- Government
- Other industrial handling

These were divided into high priority segments, medium priority segments, and low priority segments, based on to the *segment value* and Volvo CE's *ability to capture* the segment. The study showed that in the short and long term, there are four attractive segments for Volvo CE: Civil engineering/Heavy construction, Extraction, Recycling/waste management, and Wood handling. In the long term, Rental was expected to become a high priority segment.

In a closer evaluation of each segment, the evaluation of the recycling/waste management segment showed that Volvo CE had a strong market share in articulated haulers and wheel loaders, but very low in excavators, which is the product line with highest sales in the segment. Volvo was also completely lacking sales in some of the product lines with most sales in the segment, since the company does not carry these product lines. These included crawler dozers, compaction, backhoe loaders, skid steer loaders, and RT Lift trucks, with total sales exceeding 800 million USD. In the recycling/waste management segment, Volvo CE had not met the objective from the study made in 1995, "*to have a full line of products, both hard and soft*".

4.5.1.2 Implementation of the Market Segmentation and Product Planning Project

To implement the essential findings in the Market Segmentation and Product Planning Project and to reach the objectives not yet met, two implementation projects were launched during the summer of 2001 (see Figure 6).

They were defined with objectives, recommended actions and responsibilities. One of them is called *Segmentation Approach* and the other is *Market Driven Product Planning*. The objective of the Segmentation Approach project was to “*improve Volvo CE’s way of working with customer segmentation*”.

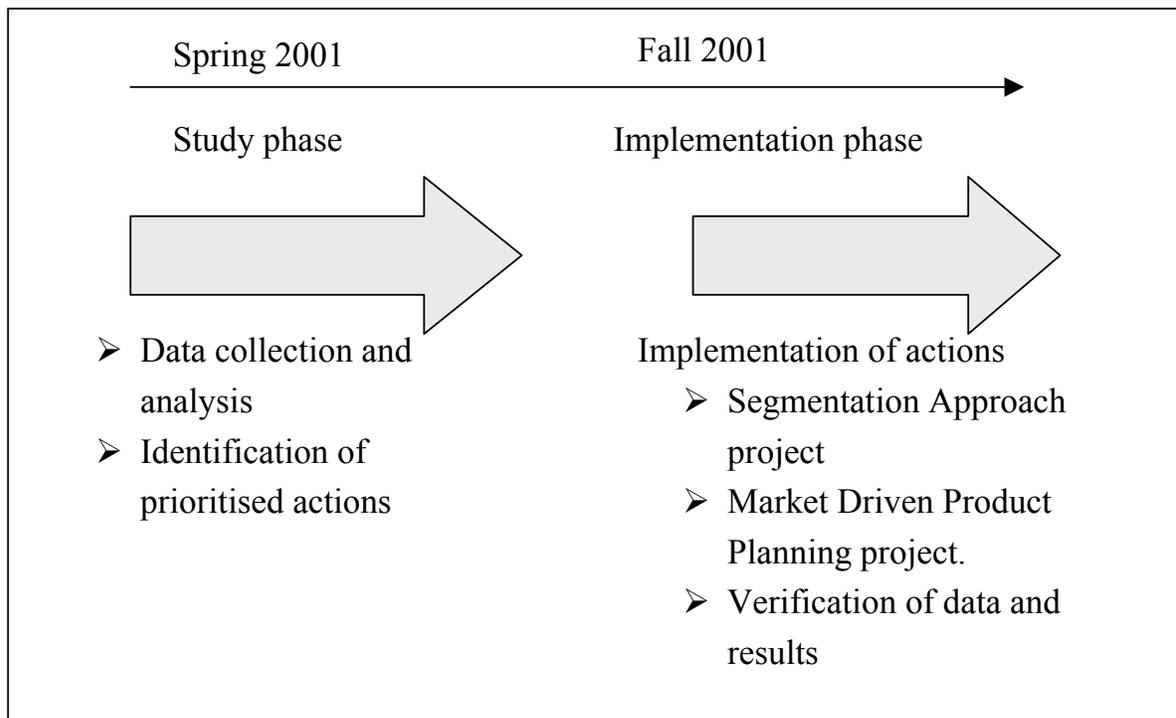


Figure 6 Market segmentation and Product Planning Project. Source: Volvo CE

Three action steps were planned

1. Recommend a process to achieve short and long term market gains within identified high priority segments (Civil engineering/heavy construction, Extraction (excluding mining), Recycling/waste management, and Wood handling).

2. Further analyse and identify possible potential in medium priority segments (Building, Government, Piping/Private utilities, Rental, Site preparation).
3. Improve follow up and analysis capabilities related to segmentation dimension

In the Segmentation Approach project, three prioritised actions were appointed:

1. Implement Segmentation team
2. Implement Segmentation approach in Commercial System
3. Include segment dimension in Business planning process

The first action, to implement a segmentation team, includes implementing pilot project teams, appointing segment owners and hiring expertise. This has not yet been done for the recycling/waste management segment, since Volvo CE is lacking knowledge about the segment and is initially concentrating on implementing segmentation in the two of the other high priority segments. In these two segments, pilot teams have started to evaluate the best way for the company to become more customer focused in each segment. The pilots are still in their initial stage.

The Market Segmentation project and the Product Planning project should be viewed as one part of Volvo CE's visions for the future. Currently, strategy revisions and restructuring projects are undertaken in several parts and processes of the company, of which the Markets segmentation and Product planning project is one.

Volvo CE wants to be positioned as true "solution provider" in the future. In order to reach this position in the minds of the customers, Volvo CE has set up four key areas to be improved and revised: expansion of product range (both hard and soft products and applications); geographical expansion (focus on position strengthening on emerging markets and in NAFTA and Japan); channels to market expansion and improvement; and customer segment expansion. Customer segment expansion implies a focus on the high priority segments.

4.5.2 MAPPING OF VOLVO CE'S CURRENT POSITIONING

In each of the high-priority segments, Volvo CE needs to create a positioning strategy in order to find a well-defined position that fits Volvo CE's overall future strategies presented above. An understanding of Volvo CE's current position in each segment is a prerequisite for being able to understand how the company should work with positioning within the segment in the future. To map Volvo CE's current position in the recycling/waste management segment, we have used customer interviews, interviews with Volvo CE personnel at different levels, as well as internal Volvo CE material.

4.5.2.1 Internal Volvo CE Positioning Study

As part of the segmentation study, in which the five high-priority segments were identified, regional and business line managers in Volvo CE were asked about their perception of the company's position in the minds of the customers in the different segments. The result is summarized in Table 4. The respondents perceived Volvo CE's position in the recycling/waste management segment as being far from the wished position. According to the respondents, *productivity* was the only area where customers' perceived Volvo CE as fully meeting their needs. Only in this area, according to the respondents, did Volvo CE have the position the company wanted. In the areas *availability and quality, environment, safety, sales price, parts availability and price, dealer service and support, coverage of dealer networks, operator comfort and design, and distance to dealer*, the respondents perceived Volvo CE's position as insufficient. In these areas, the respondents claimed Volvo CE was barely perceived as meeting their needs in the minds of the customers. In the areas *cost effectiveness, soft offers, delivery time and punctuality, and product range completeness*, the respondents felt Volvo CE's position in the minds of the customers was really unsatisfactory. They claimed Volvo CE was perceived as *not* meeting the customers' needs in these areas.

Volvo CE's internal view of the company's position in the recycling/waste management segment	Area
Fully meets customers' needs	Productivity
Barely meets customers' needs	Availability and Quality, Environment, Safety, Sales Price, Parts availability and price, Dealer service and support, Coverage of dealer networks, Operator comfort and design
Does not meet customers' needs	Cost effectiveness, Soft offers, Delivery time and punctuality, Product range completeness

Table 4. Volvo CE's view of their position in the recycling/waste management segment.

Source: Volvo CE

This study gives us a fairly good picture of Volvo CE's position in the recycling/waste management segment. However, in order to get a true picture of Volvo CE's position in the minds of the customers, the customers' point of view is, of course, most important. Also, the point of view of the Volvo CE people of the company's positioning in the recycling/waste management segment needs to be updated and analysed with the findings from our interviews with Volvo CE people at different levels of the organisation.

4.5.2.2 Updating the Positioning Picture

Volvo CE's position in the recycling/waste management segment is where it is positioned in the minds of the customers. Even though the employees at Volvo CE have a good understanding of the company's positioning, the true position lies in the customers' perception of the company.

Our interviews with customers in the recycling/waste management segment gave us a good picture of Volvo CE's position in the minds of the customers.

Although not statistically proven, the results of the survey gave further support to our findings about Volvo CE's position.

The picture of Volvo CE's position we got after the customer interviews is not quite as negative as the one that regional managers and business line managers in Volvo CE gave in the segmentation study described above. They claimed Volvo CE was only perceived – in the minds of the customers – as fully meeting the customers' needs in one area, productivity, within the recycling/waste management segment. The findings of our interviews with customers in Sweden and the UK show that Volvo CE is in fact meeting or is close to meeting customers' needs in more areas in the segment. Just as the regional managers and business line managers thought, our findings also showed that the customers are very satisfied with Volvo CE's products' *productivity*. Concerning *Safety*, *Durability* and *Easy of use*, both our interviews and the survey showed that the customers are very happy with Volvo CE and its products. The customers we interviewed and the respondents of the survey were also rather satisfied with Volvo CE's performance in the areas of *operator comfort* and *environment*.

Our findings from the interviews, supported by the results of the survey, show that the picture of Volvo CE's position in the minds of the customers in the recycling/waste management segment that Volvo CE internally had was too pessimistic. According to our findings, Volvo CE is in fact well positioned in the minds of the customers in *product related* areas. An important finding is that our interviews clearly show that the company is less well positioned in the minds of the customers in the *service related* areas. The customers we interviewed perceived Volvo CE's performance in *parts availability* and *quick service and response* as much less satisfactory when compared to the product related areas. One of the customers we interviewed expressed himself concisely in this matter: "I have had very few problems with Volvo's machines and the drivers like working with 'em, but it takes way too long to get it fixed if or when it is broken down" (G.B. Richmond, October 19, 2001).

The surveys we sent out to customers support the findings of the interviews. Although we cannot draw statistically proven conclusions from the survey, the

answers indicate a less satisfactory position in the minds of the customers Volvo CE in the soft product areas.

Our interviews with customers also showed that it is increasingly harder for suppliers in the construction equipment industry to have a unique position in the minds of the customer based purely on superior product quality. The position is strongly associated with a company's distinctive way of delivering value to its targeted customers, and value is no longer generated solely by superior product quality. The customers we interviewed claimed the differences in quality between different suppliers' products are not as big as they used to be and that they almost *expect* superior product quality when they buy a product, at least when they buy a product from the global players in the industry. To have a position in the minds of the customers as a supplier of superior value, a supplier must differentiate itself through excellence in soft products. Chris Rees showed a great understanding of this during our interview (October 18, 2001) with him at Volvo CE in Duxford, the UK: *"Since customers expect the technical excellence, it is the support around the machine that differentiates you...As an example, the best excavator on the UK market is probably Kobelco, but they still only got a two percent market share. Even though the product is technically superb, the customers' perception of the company is that they have a poor back-up organisation. Customers do not associate Kobelco with an overall feeling of quality."*

During our interviews, we noticed that the suppliers' position in the minds of the customer is constantly changing. This might be due to an action taken by the supplier to reposition the company; for instance, by improving service support or paying full attention to a certain customer group or segment. It could also be the customer who changes its attitudes and, therefore, repositions the suppliers in its mind, for various reasons. Although not expressed in terms of repositioning, the interviewed customers all emphasised how nowadays they are looking for suppliers who not only have superior products, but provide excellent tailor-made solutions for their needs. This way of looking at the suppliers offerings has meant a repositioning of the suppliers, since customers are taking more factors into consideration when judging a supplier's performance in satisfying their needs. This repositioning is not driven by the

suppliers; it is driven by a change in the customers' attitudes. This seems especially true for larger customers. The large customers we interviewed and from whom we received replies to the survey, showed patterns of looking even less at the initial purchasing price. They seemed to take superior product quality for granted when buying from the large suppliers, while they were really emphasising the importance of service related factors that made sure they would never have a break-down in the daily operations.

In this chapter we have described the empirical evidence of Volvo CE and the recycling/waste management segment and now we move on to the next chapter. This chapter analyses the findings from the theoretical and the empirical study.

5 ANALYSIS

The analysis will evaluate and further develop the empirical findings by using the theoretical framework. This will provide a foundation for our conclusions, where our findings are put in the context of the research problems and main problem and our theoretical framework. The structure of the analysis is based on the three different theoretical contributions: Value, Organisational Buying Behaviour and Positioning.

The value theory and the theories about positioning and organisational buying behaviour form our definition of customer-perceived value. Due to the interrelationship between them, the theories should be recognised as one entity. As a result, the sections in the analysis are closely related to each other and part of the same entity, the customer-perceived value. We start to analyse the value.

5.1 VALUE

In our mapping of the value-generating processes in the minds of the customers we structured the processes into four areas; product factors, soft factors, emotional factors and total ownership costs.

According to the theoretical framework used, based on Monroe (1991), value is seen as the ratio of *perceived benefits* relative to *perceived sacrifice* that goods and services generate for customers. The value of the goods and services bought is created in the customers' value-generating processes. Volvo CE should think in terms of providing solutions consisting of all the components required to function in a value-creating way in their customers' own value-generating processes.

By comparing the findings from our field study with the value equation of benefits and sacrifices, an understanding of how value is created in the recycling/waste management segment is given and our case company can adjust its implementation of the segmentation approach accordingly. To review the value equation, perceived benefits are a combination of physical attributes, service attributes and technical support available in relation to the particular use

of the product, as well as the purchase price and other indicators of perceived quality. Perceived sacrifices include all the costs the buyer faces when making the purchase: purchase price, acquisition costs, transportation, installation, order handling, repairs and maintenance, risk of failure, or poor performance.

The value equation: $\frac{(\textit{perceived})\textit{benefits}}{(\textit{perceived})\textit{sacrifices}} = \textit{value}$

The four areas of value-generating processes we have identified are recaptured in the context of the value equation.

5.1.1 PERCEIVED BENEFITS

The perceived benefits of a supplier's offerings in the recycling/waste management segment are a combination of several factors, as the theoretical definition of perceived benefits suggests. However, our findings show that the different factors can be further narrowed down to see exactly what in each factor influences the total perceived benefits. Also, our findings show that the factors influence the total perceived benefit unequally.

Within the *physical attributes*, there are mainly two factors strongly influencing the perceived benefits: productivity and durability of the product, which are equally important. This is especially true for customers where the waste handling products are an important part of the production chain. In this segment, the physical attributes that influence the perceived benefits are also highly influenced by the ability to change features and applications of the products according to a customer's special requirements. The customers are looking for suppliers that show that they are dedicated to the business the customer is in, and that they have the ability to satisfy its specific needs. Customers thus are looking for products specifically adapted to their business. The operator's comfort and safety, how environmentally friendly the product is, and the product's ease of use are other factors influencing the perceived benefits.

Concerning the *service attributes* and *the technical support available in relation to the particular use of the product*, these can be broken down to see

what factors within these areas are influencing the perceived benefit most in the minds of the customers in the recycling/waste management segment. It is important to notice that our findings show that the service attributes are as important as the physical attributes in influencing the perceived benefits in this segment. The most important factors in this area are technical support related to the product: quick service and response, and maintenance. Our findings showed that the part these factors play in the perceived benefits is constantly increasing, as the difference between suppliers' products is decreasing. Also, decreasing margins creates a very low tolerance for non-running machines. This also means that spare parts availability is an important influencer on the perceived benefits.

Concerning service attributes not related to the particular use of the product, the most important, or actually the only service attribute apart of the product related that influence the perceived benefits, is financial and warranty packages. Our interviews showed, however, that these packages do not influence the perceived benefits to the same extent as the previously mentioned service attributes and technical support. Also, our findings show that the customers' personal relationship to the sales person was less of an influence on the perceived benefits than expected. The relationship to the company was, however, very important.

The physical attributes and the service attributes equally influence the perceived benefits for customers in the segment on which we focused. These attributes are the most influential of the perceived benefits. Less influential are the *other indicators of quality*. These factors are not related to the product or the service.

Indicators of quality are imbedded in the minds of the customers and less easy for suppliers to affect or change. Concerning the indicators of quality, having a good relation with the supplying company is, as mentioned, a very important influencer on the perceived benefits. Not necessarily having a personal relationship with the sales person, which was a factor influencing the perceived benefits to a lesser extent than expected, but having a good relationship with the company. The company must have treated the customers fair and lived up

to its promises. Also, the brand of the products bought and the suppliers' corporate identity are important influencers on perceived benefits. The customers want products and brands that support or improve their own identity.

5.1.2 PERCEIVED SACRIFICES

The perceived sacrifices in the recycling/waste management segment are related to the monetary sacrifice for a customer. The larger the expected total amount for the customer, the higher the perceived sacrifice.

In recent years, the relative influence different factors have on the perceived sacrifice has shifted. The purchasing price used to be, and still is for some customers, the far most important influencer on perceived sacrifice. Today, more factors other than the initial purchase price are influencing the perceived sacrifice, as customers more and more are taking the total lifetime monetary sacrifice for a product into consideration. Many customers are thinking more in terms of total ownership costs. There are three factors, apart from the purchase price, that are particularly influencing the perceived sacrifices nowadays, in the recycling/waste management segment. The expected costs for maintenance and repairs influence the perceived sacrifice to a large extent. Also, fuel costs are important, especially since the price for fuel has increased substantially. Apart from these, the interviews showed that the risk of failure or poor performance is influencing the perceived sacrifice. Customers strongly dislike uncertainty and unexpected costs.

Our findings of how value is generated in the recycling/waste management segment are illustrated in Figure 7 below. In the section that follows the model, we analyse the organisational buying behaviour in the recycling/waste management segment.

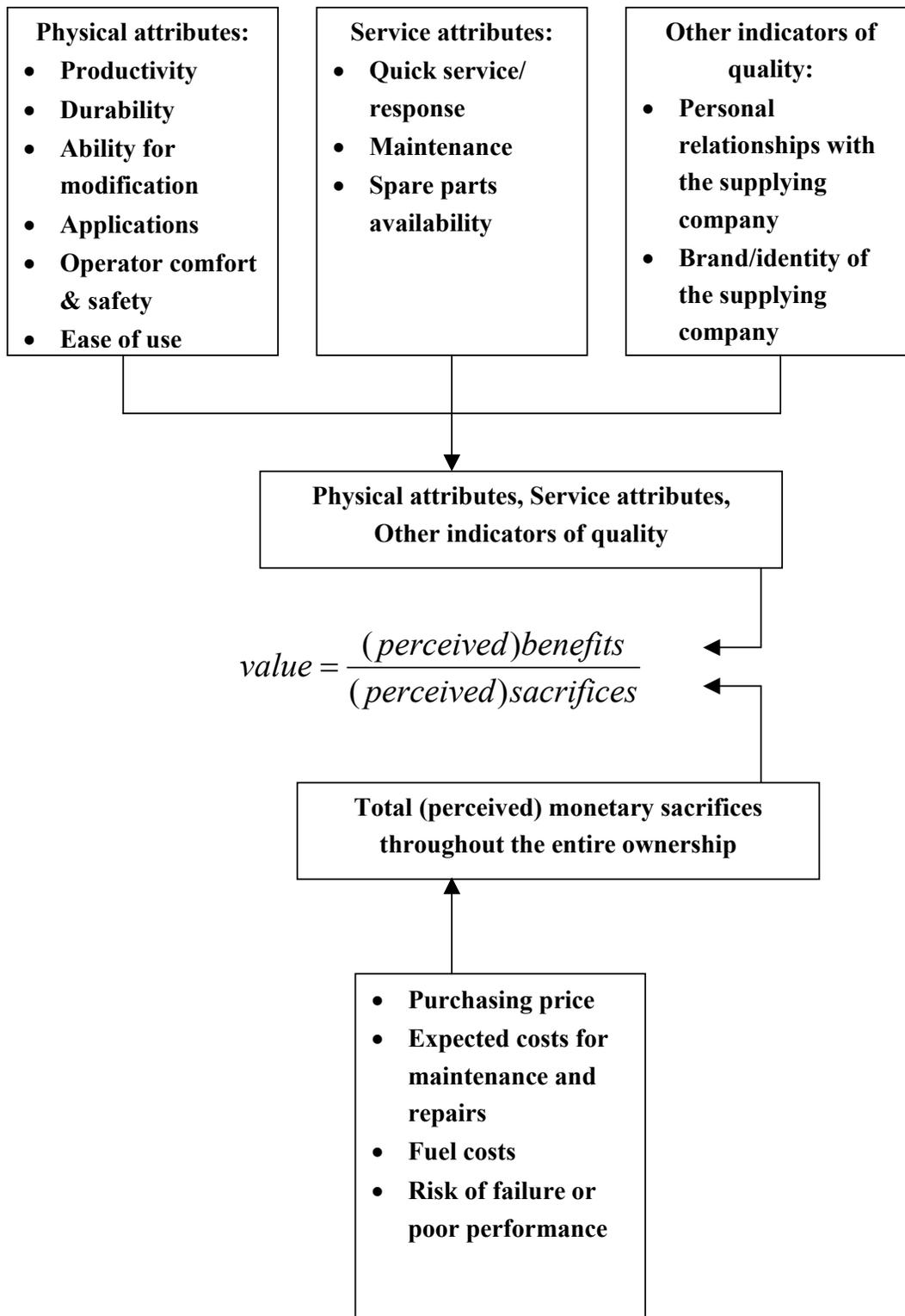


Figure 7 Value-generating in the recycling/waste management segment. Source: own

5.2 ORGANISATIONAL BUYING BEHAVIOUR

In this section, we analyse the organisational buying behaviour in the waste management industry based on the theoretical and empirical study. The analysis is structured according to the theoretical part, where the purchase process is first presented. Since the organisational buying behaviour in this segment is very complex, we look at which factors that are influencing the buying process. To identify the buying behaviour in the recycling/waste management segment, we thus analyse the factors that affect the purchase process in organisations in the recycling/waste management segment. After breaking down the purchase process and its influencers, an understanding of the organisational buying behaviour in the waste management industry is given.

5.2.1 THE PURCHASE PROCESS

According to the theory, the purchasing process exists from the moment a need for a product is revealed until the product is in the hands of the buyer. The recognition of a need for a new product is often realised in two distinct ways in the waste management industry. It could either be realised for economic and financial reasons or by simply replacing an end-of-life machine. After the need recognition, the next step of the process is to identify what kind of activity the product is supposed to perform and thereafter determine the machine and applications. The buyer invites suppliers to present an offer, which is examined and evaluated. After negotiations with the most interesting suppliers, the buyer selects the supplier that can offer most value. When the deal is completed, the buyer and the seller develop routines for activities such as service and maintenance. Certain buyers create programs for collecting information about the product and the supplier to better evaluate their performance.

However, this is the ideal purchase process within a waste management organisation. It differs from organisation to organisation and from buying situation to buying situation. The process may vary due to the number of steps, the order of the steps and the length of every step and so on. How the purchase process actually looks like is presented during the analysis of the different influences. These influences are affecting the purchasing process in several varying ways.

5.2.2 ENVIRONMENTAL INFLUENCERS

The legal environment affects the waste management organisation's buying process severely due to its fast and drastic changes. The national governments and other institutions, such as the European Union, create this legal environment for the waste management industry. New laws and regulations influence changes in waste management procedures, which often means a change of activities for a customer in the industry and, consequently, a need for new products. An actor may be forced to rearrange its waste activities; for example to, focus less on land filling activities and more on recycling activities. This will affect an organisation's way of working, as well as their purchasing process. Changes in laws and regulations in the environmental area are thus also driving the technological development in the industry.

The legal environment is also a heavily influencing the purchase process in public organisations. These organisations have to follow strict regulations in public procurement. The description of procurement has to be publicly announced in order for all suppliers to have the opportunity to submit an offer. The waste management organisation is obliged to examine the offers and select the supplier that meets the requirements at the lowest price. This is putting restraints on the public purchase process compared to the private process.

Changes in the economic environment is not affecting customers' purchasing processes to the same extent as in many other industries, since the industry seems to be rather immune to economic cycles in a country or region. The amount of waste is not very dependent on the economic changes.

The political and cultural environment is directly affecting the legal environment and thereby the purchasing process. In countries such as Sweden and the United Kingdom, where environmental care is high on the political agenda and people are very environmentally concerned, this awareness' influence on waste management rather vast. It puts pressure on organisations to become environmentally friendly in their way of acting and working.

5.2.3 ORGANISATIONAL INFLUENCERS

The size of the waste management organisation has a great impact on the buying process. Larger organisations purchase products from the construction equipment industry more regularly compared to smaller organisations; therefore, the purchase processes become more of a routine. Small organisations may only use one or two machines and since the durability of the machines normally is several years, the purchase process will not be habitual.

Since buyers in the recycling/waste management segment are not buying waste management machines very often and it is a complex purchase procedure that looks rather differently from one purchase to another, the purchases processes in this industry have not been standardised with technological tools such as in many other industries. In other industries, a constant drive for simplification and cost savings of purchases has led to a quick development of e-business and EDI solutions, which has not been the case in this industry.

Buyers in the waste management industry can broadly be divided into two distinctive groups according to their ownership structure: public organisation and private organisation. The ownership structure affects the buying process in various ways. In a public organisation, the ownership structure often makes the process more time consuming and complex when compared to purchase processes in private organisations. The organisation is forced to follow the legal procedure of a public procurement, as well as the organisation's internal rules. The internal rules often create a lot of administrative work and require more time compared to private organisations' purchase procedures, due to structured interactions between the managers and the board. The ownership structure in private organisations affects the purchase process differently depending on where the purchase decision is made in the organisation. A private organisation with a non-hierarchical structure where the purchase decision is made close to the production seems to take more non-economical factors into consideration in the decision process.

5.2.4 GROUP INFLUENCERS

A buying centre in an organisation operating in the waste management industry varies in how it looks from company to company. The number of decision

makers involved in the purchasing process and the roles of the decision makers in the group affect the purchase process. Theory about organisational buying behaviour claims that the buying centre consists of people with different roles: users, buyers, influencers, deciders and gatekeepers. The buying centre in a minor waste management organisation may consist of one person playing all roles, especially as the decision maker could be the same person as the user. In larger organisations, the roles are more applicable to certain persons within the buying centre. According to our observations, the buyer and the decider are often the same person in private organisations, while these two roles are generally more separated in public organisations.

The people in the buying centre socialise with each other and also with people from other facilities and organisations. Subsequently, people within the buying centre in a waste management organisation affect each other and they are affected by people from both their own organisation and outside of the organisation. Indirectly, the people in buying centre are thus influenced by the people whom they are working with and the people who they meet outside the organisation.

5.2.5 INDIVIDUAL INFLUENCERS

Within a buying centre, the factor influencing the buying decision most eventually is the members' personal characters and perceptions. The members' personal characters and perceptions heavily influence the purchase process in the waste management industry, as in every industry. Even though the buyer in a waste management organisation must consider certain aspects and unwritten rules from the organisation's perspective, it is ultimately their personal character that affects the decisions made. Personal character and perception are hard to change, since they are deeply imbedded in our personality. The individuals will always consider his/her feelings together with the facts in a decision making procedure.

5.2.6 PRODUCT INFLUENCERS

The characteristics of the products bought in waste handling influence the purchase process. Since the purchase of a waste handling product is a large investment for all kinds of organisations, the purchase process is often very

carefully observed. The supplier and the product will be examined thoroughly. The product is often a part of the daily waste handling process, which makes the purchase very important for the organisation and its activities. Selecting the right supplier with the right product may contribute to increased efficiency together with less cost.

5.2.7 SELLER INFLUENCERS

According to the theory, the purchase process is affected by the seller, or more precisely the buyer's expectations of the supplier and its offerings. Waste management organisations tend to have certain expectations for certain suppliers, especially those suppliers from who the organisation has previously bought equipment or heard about. This influences the buying process, since the buyer will, prior to the process, have a certain perception of the supplier's performance based on previous experience. The perceptions of the supplier can be negative, neutral or positive depending on previous experience of the supplier.

5.2.8 INFORMATIONAL INFLUENCERS

The decision makers in the buying centres can be affected by information about a supplier's products, which can influence the buying process and the buying decision. However, the decision makers in waste management organisation are not heavily exposed to information about the suppliers and their offerings. There is not an excessive amount of advertising. Information material is often collected during visits from the suppliers and at industry fairs.

5.2.9 CONFLICT INFLUENCERS

According to the literature, conflict traits influence the purchasing process. Conflicts within the waste management organisations we visited are resolved through rational and irrational methods. For instance, the decision makers listen to the operator since this person is the user of the machine and together they solve the problem. If the operator feels treated wrongly, he/she may use the machine in a non-economic and inefficient way and could consequently influence decision maker's buying decision. However, in our findings we did not find conflicts to be a major influencer in a buying decision.

5.2.10 RELATIONSHIP INFLUENCERS

The relationship significantly affects the purchase process in the waste management industry. A purchase without a relationship between the supplier and the buyer rarely exists in this industry. Even though the personal relationship between the sales person and the buyer proved to be less influential on the perceived value than expected, it is one of the underlying factors contributing to a successful purchase.

As the purchase of waste management equipment is a large investment, mutual trust and commitment are important ingredients of the purchasing process. These are created through long-term relationships between two companies. A relationship is a very powerful tool in the waste management industry, but at the same time one easily broken and lost if not nurtured. A relationship is almost always the reason for a purchase done in the 'informal way'. In other words, the decision makers in the waste management organisation very often make up their mind previous to the purchase of what type of product and from which supplier they are going to purchase. This is the reality in both private and public organisations, even though the latter organisation has laws and regulations to follow. A strong relationship shortens the purchase process and makes it less complex.

We conclude the analysis of organisational buying behaviour in the recycling/waste management segment by illustrating the most important factors in Figure 8. Since the buying behaviour in the waste management industry is very varying, we demonstrate which factors that are influencing the purchase process to get an understanding of the organisations' buying behaviour.

The last part of the analysis concerns Volvo CE's position in the waste management industry, which is discussed in the following section.

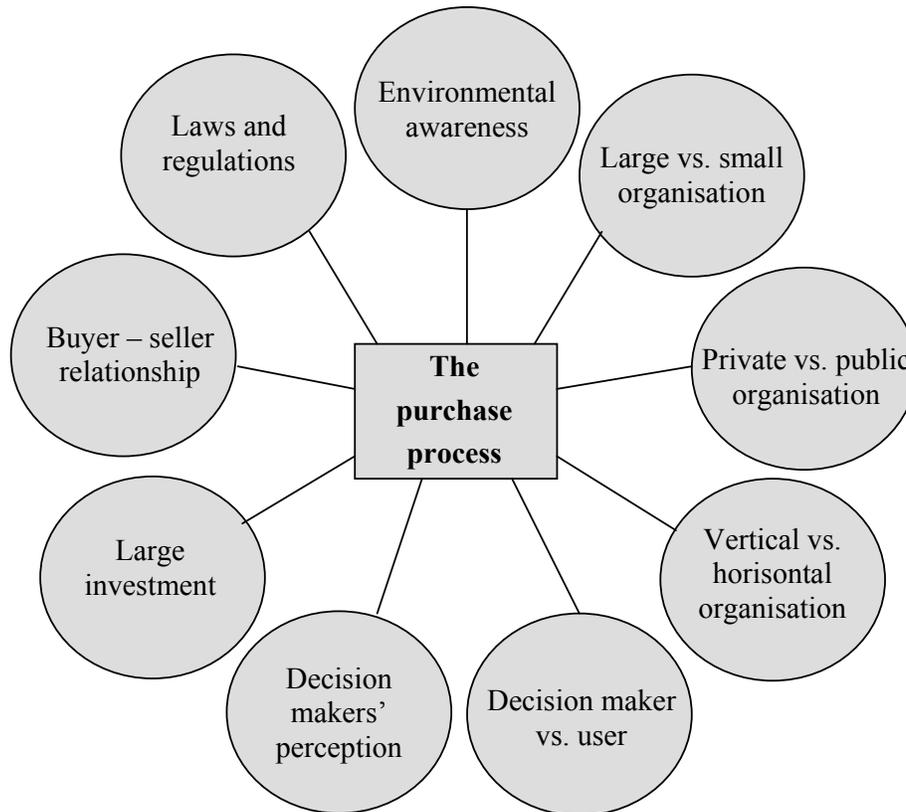


Figure 8 Influencers on the purchase process in the recycling/waste management segment.
Source: own.

5.3 POSITIONING

In this part, we look closer at the mapping of Volvo CE's position in the minds of the customers in the recycling/waste management segment, which was presented in the empirical evidence. By looking closer at the empirical evidence in this area and expressing it in terms of the theories presented in the theoretical framework, an examination and clarification of the empirical findings are possible. To recapture the meaning of positioning; it is about designing Volvo CE's image and value offering so that the customers in the segment understand and appreciate what the company stands for and what makes it unique. Volvo CE's position in the minds of the customers is relative to the competitors' position. We are only analysing our case company's position in the minds of the customers and not its competitor position.

Our empirical findings about positioning consisted of three parts: Volvo CE's wanted future position in the minds of the customers; Volvo CE's perception of the company's present position in the minds of the customers in the recycling/waste management segment; and our findings after our field studies concerning Volvo CE's position in the segment.

According to the literature studied, a company should *segment* the markets. It should also decide what type of customers the company wants to *target* in the segments and thereafter create a *positioning* strategy.

As we have observed, Volvo CE has *segmented* the market and chosen five high-priority segments. Thus, it is initially in these five segments that Volvo CE should create a positioning strategy.

The company has not outspokenly *targeted* certain customers within these segments, but with its rather high price level and its focus on quality, safety, and environmental friendliness, it is rather evident that the company is not looking to compete on price and target price sensitive customers. Volvo CE is looking to get a larger 'piece of the cake' of the large customers' purchasing budget, an area in which Caterpillar has been very successful, according to the Volvo CE people we interviewed. Volvo CE is targeting customers who appreciate what Volvo CE's products stands for and who are willing to pay a little bit more to acquire them.

In the minds of these targeted customers in the selected segments, the company must *position* itself according to the company's wished position in each segment. Closely related to Volvo CE's aim to target large customers is Volvo CE's objective to become a solution provider. The company wishes to have the ability to offer a complete range of products and services that satisfies a customer's total needs. The positioning strategy must coincide with other activities in the company. In order to create the wished position in the minds of the customer, marketing and sales activities must support the wished position. Volvo CE has an outspoken aim to create a position in the minds of the customers as being a solutions provider. In order to create that position,

marketing and sales activities must be adjusted according to this positioning objective.

Myers (1996) states three key categories of requirements for creating an effective positioning statement: *uniqueness*; *importance/desirability*; and *believability*.

In the recycling/waste management segment, our interviews with customers, supported by our findings of the survey, show that Volvo CE is very well positioned in the minds of the customers in the segment in some areas. The company has a good position concerning productivity, safety, durability, and ease of use. Also concerning operator comfort and environmental friendliness, the company has a fairly satisfactory position in the minds of the customers. It is in these areas that Volvo CE has its *uniqueness* in its position compared to its competitors. It is important to notice that customers have told us during interviews that superior product quality is something almost expected nowadays in this business and a prerequisite for suppliers to even be in the bidding for deals.

To have the deal in the end, it is as important that the company have a good position in the minds of the customers concerning service related factors. Our findings showed that Volvo CE is not as well positioned in the minds of the customers when it comes to service related factors as they are in the product related factors. During customer visits, we realised that Volvo CE did not have a satisfactory product range. Another important finding in the analysis regarding the uniqueness of Volvo CE's position in the minds of the customer in this segment is that Volvo CE's perception of the company's position does not coincide with the customer's perception. Our findings show that Volvo CE, in fact, has a good position in the minds of the customers in this segment in more areas than productivity. According to the internal Volvo CE study, the respondents perceived the company's position as unique only in productivity. Our findings showed a satisfactory position regarding durability, safety, ease of use, operator comfort and environmental friendliness. When these factors are put together, a unique position in the minds of the customers regarding product factors is indicated.

Volvo CE is, thus, best positioned in the minds of the customers in areas where it is getting harder for a supplier to have a unique position. Volvo CE's areas of uniqueness are, of course, very important for the customers, but since superior product quality is to some extent taken for granted by customers today, the company's *distinctiveness is not as desirable* as it used to be. Customers have told us that they are looking equally much on the service factors and product factors when they are choosing a supplier. Thus, it is equally important to have a good position in the minds of the customers concerning soft products today, since it is to an increasingly larger extent the position in these areas that separates one supplier from another and creates uniqueness and desirability.

The third requirement for creating an effective positioning statement is that the company must have a position as *believable* in the minds of the customer. As we see it, this is about being perceived by the customers as treating them *fairly*; not necessarily being extremely generous to customers, but always treating them fairly and keeping promises. Again, our interviews showed that in the product related areas, Volvo CE has a good position concerning being perceived as keeping promises and treating customers fair, but less so in the service related areas. However, Volvo CE has realized this fact. An example of the company's awareness is the new slogan that will be used in marketing – *We will treat you right* – which might improve the company's position in the service related areas. The very fact that the company uses “*will treat you right*” shows that the company is aware of the fact that they might not always have done so previously, but intend to do so in the future.

After analysing the theoretical framework and the empirical findings, we present our conclusions of the analysis, the theoretical framework and findings outside of the study in the next chapter.

6 CONCLUSIONS

This section concludes the analysis and answers the main problem, and presents our theoretical conclusions, in order to prepare the recommendations. The conclusion is divided into three parts, where the first part answers the three research problems based on our theoretical and empirical study. The outcome of the research problems leads to a resolution of the main problem. In the second part, our conclusions of the theoretical framework are presented. Finally, we illustrate the findings that emerged during the analysis of the empirical evidence which are not theoretically verified in our study.

6.1 CONCLUSIONS OF ANALYSIS

By concluding the analysis, we are able to answer the research problems. By answering the research problems, the main problem can be solved.

6.1.1 RESEARCH PROBLEMS

1. What do the customers' needs and wants look like and how will they change?

According to the literature, the pre-eminent way to identify customers' needs and wants is to understand what the customers perceive as *value* and how that value is generated. The theory implies that value is the relation between the perceived benefits and perceived sacrifices of goods and services and that actual value is created when the customer utilizes these goods and services. An identification of the influencers of value will lead to an understanding of customers' needs and wants and how they will change.

The influencers of perceived benefits in the waste management industry are several. They can be divided into physical attributes, service attributes and other indicators of quality. The most valuable physical attributes are the product's productivity and durability, particularly if the product is a vital part of the production chain. An essential attribute is the product's ability for

modification and applications as certain products can become multipurpose machines and customers' needs cannot be standardized. Other important physical attributes are the operator's comfort and safety, the product's environmental effect, and its ease of use.

In order to create value for a waste management organisation, the supplier must have the ability to develop the products according to the customer needs. Volvo CE is meeting several requirements regarding the physical attributes, though certain requirements are not transferred back to the product development and planning and do not meet the needs.

The service attributes in the recycling/waste management segment are increasing in importance for the customers and are as vital as the physical attributes. The most significant attributes in this aspect are quick service and response, and maintenance and spare parts availability. For a waste management organisation, value is only generated when the products are functioning. If a machine is broken down it has to be repaired as soon as possible. Other service attributes, not directly related to the product, but which generate value for the customers are financial and warranty packages and personal relationships. Financial and warranty packages do not, however, generate very much value to customers in this segment. Our findings shows that the relative importance of the service attributes in generating value will increase, due to the fact that the differences between suppliers' products are decreasing. Superior product quality is almost taken for granted nowadays by customers who are buying from the global suppliers, thus superior product quality is not a way to differentiate for the future.

The last group of influencers of perceived benefits is other indicators of quality, which do not generate as much value as the physical and service attributes. The buyers' perception of a supplier's image and corporate identity are important influencers of value, as well as having a satisfactory relationship with the supplying company.

The relative importance the influencers of the perceived sacrifices have, is changing in the waste management industry. The influencers on the perceived

sacrifices are monetary, but nowadays the purchase price influences the perceived sacrifice to a less extent. Our findings show that the total ownership cost, and not the purchase price, is the largest influencer of the perceived sacrifice. Costs for maintenance and repairs, fuel and risk of poor performance influence the perception of the total ownership cost and thus influence the perceived sacrifices in the recycling/waste management segment.

The influencers of the perceived benefits and the perceived sacrifices determine how value is generated for customers in the recycling/waste management segment. How value is generated reveals what the customers' needs and wants look like and how they will change.

2. What does the customers' buying behaviour look like and how will it change?

In order to get an understanding of what the customers' buying behaviour look like in the recycling/waste management segment, we had to generalise our findings. As the theory describes, there is no "one" or "true" industrial purchasing process as every buying situation is unique. Even so, organisations in market segments go through similar procedures and behaviours regardless of the purchase situations.

The ideal purchase process, described in the theoretical study, includes a certain number of predetermined steps. In the recycling/waste management segment, this ideal purchase process barely exists and the purchase process in different organisations and situations varies. In order to understand what the customers' buying behaviour looks like, we have to look at the factors that are *influencing* the customers' buying behaviour in the segment. An understanding of the influencing factors will thus clarify what the customers' buying behaviour looks like in the recycling/waste management segment. The influencing factors are discussed below.

The legal environment heavily affects the buying process within a waste management organisation. Laws and regulations control the activities and determine how the waste handling will look like in the future. As a

consequence, waste management organisations are forced to reorganise their business to fit the legal environment and these new activities may require new products and applications. Consequently, the supplier can satisfy future needs by predicting changes in the legal environment. Public waste management organisations are directly influenced by the legal aspect, since these organisations have to follow the regulations regarding public procurement. Informally however, the buying process may look completely different.

A country's economic situation is not a major influencer on the waste management organisations' buying process, but it does influence what kind of waste is produced and the handling of the waste. The kind of waste produced and the handling of the waste in an economically well developed country look differently compared to that of a less economically developed country. The public opinion is indirectly affecting the purchase process within an organisation as the political and cultural factors stress organisations to act environmentally.

The characteristics of the waste management organisations shape the purchase process. Larger organisations tend to have a more routine way of purchasing in comparison to smaller organisations. The organisational structure of a waste management organisation also affects the buying process, as our findings showed that an organisation with a horizontal structure tends to consider more emotional factors compared with an organisation with a vertical structure. The buying centre within an organisation can consist of one person with several roles or several persons with individual roles. The decision maker in a small waste management organisation is often the user of the product, which makes the purchase process more emotional. A buying centre with one person will have a unified view of the process, while a buying centre with several persons and roles may have a more compromised view. These persons could perceive information and suppliers in a totally dissimilar way. The individual decision maker's perception of a supplier and its products has a very strong effect on the purchasing process.

Any organisation is extra careful regarding the purchase process of a product that is an important part of the daily waste handling process. Therefore, the

buying process for such a machine is more complex and time consuming compared with other products. A factor that greatly affects the purchase process is the relationship between the supplier and the buyer. A personal relationship with the individual sales person is however not perceived to be as important as having a relationship with the supplying company as a whole. Some kind of relationship with the sales person nevertheless is almost a prerequisite in the waste management industry. Since the purchase of construction equipment is a large investment, the decision maker demands trust and commitment of the supplier, which is developed through relationships. A relationship can be so strong that the supplier is already predetermined who to purchase from even before the purchase process begins, which may be the case for both public and private organisations.

An understanding of the influencing factors of the customers' buying process in the recycling/waste management segment demonstrates what the organisational buying behaviour looks like and how it will change.

3. How is the case company positioned in terms of satisfying customers' needs?

The concept of positioning concerns the process of forming Volvo CE's image and value offer in order to make the segmented customers understand and appreciate what the company stands for in the minds of the customers. Volvo CE desires to become a solution provider and is targeting larger customers in the chosen five high-priority segments, which may require a wider range of products and services in the recycling/waste management segment. In order for a positioning strategy to be successful, all activities within an organisation must be aligned according to the wished position, which demands cooperation and coordination. Especially the marketing and sales activities need to be aligned with the wanted position.

We classify Volvo CE's positioning according to Myers (1996), who implies that uniqueness, importance/desirability and believability of the company are the requirements for an effective statement. According to our study, Volvo CE has its uniqueness in the product related factors, thus a good position

concerning productivity, safety, durability and ease of use, but also a fairly good position in comfort and environmental friendliness. As we mentioned in the discussion above concerning our first research problem, our study showed that product related factors are decreasing in relative importance since superior product quality often is taken for granted and suppliers are forced to differentiate in alternative ways.

Moving over to the service related factors, our findings showed that Volvo CE is not as well positioned concerning those factors as it is for the product related factors. A significant finding from our study regarding the uniqueness is that Volvo CE's own perception of its position did not match the customers' perception of Volvo CE's position. According to Volvo CE's own perception, productivity was the only factor where the company fully met customers' needs in the recycling/waste management segment. This perception did not coincide with our findings, which showed that Volvo CE has a rather good position in the minds of the customers concerning certain product related factors.

Even though Volvo CE has a fairly good position in the minds of the customers concerning the product related factors, the company might face a difficult time to create feelings of importance and desirability. Without an equally good position concerning service related factors, these feelings can be hard to generate and the position hard to keep. The last requirement in developing an effective positioning statement is to be believable in the customers' minds, thus treating the customers fairly. In our study we found that the customers have a perception of Volvo CE as believable, even though these feelings are mostly generated out of products related factors.

As we have answered the research problems, we solve the main problem in the following section.

6.1.2 MAIN PROBLEM

How can a multi-national company, operating in a heavy manufacturing industry, become more customer focused through a market segment oriented organisation?

Companies operating in industrial markets have realised the importance of becoming more customer focused as a consequence of continuing complex market situations. A customer focus demands an understanding of the customers' needs, wants and behaviours in order to provide the wanted value. One possibility for obtaining this understanding is to group its market into segments based on similar customer characteristics. A segmentation approach can lead to a better understanding of the customers and increase the awareness of satisfying customer needs in all processes within the organisation, especially in the marketing and sales activities. This discussion demonstrates that a successful segmentation demands a lot of efforts and knowledge from the entire organisation.

Our case company, Volvo CE, has started a segmentation process within the company as a consequence of wanting to become more customer focused. Until this date, Volvo CE has reached the stage where it has divided its market into groups of customers and selected five high priority segments. The company has now reached the point where it should create segment strategies and direct its activities towards the individual segment, which demands an understanding of how value is created within each of the selected segments.

Our study examines how Volvo CE can become customer focused in the recycling/waste management segment by analysing the segment's needs and wants, what factors that influence customers' buying processes, and Volvo CE's current position the minds of the customers in the segment. By analysing these criteria, we are able to understand how customer-perceived value is generated in the segment and how Volvo CE should coordinate its activities to satisfy the customers' requirements. In order to get an understanding of the main problem we based our theoretical study on three theories: Value, Organisational Buying Behaviour, and Positioning. We believe that the

combination of these theories could create a standardised procedure for Volvo CE to become more customer focused in each of the individual segments.

Our findings revealed that value is generated in numerous ways in the recycling/waste management segment. We analysed the value concept based on the ratio between perceived benefits and sacrifices.

The perceived benefits within the segment are very much related to the products and the services and can be traced to the product's importance in the production chain. The physical attributes that create most value for the recycling/waste management are the product's productivity, durability, ability for modification, comfort, safety, environment friendliness and ease of use. The service attributes are increasing in relative importance compared with the physical attributes. Attributes that provide value for the waste management organisation are quick service and response, maintenance, spare parts availability, financial and warranty packages and personal relationships, even though the two latter attributes were not perceived to generate a lot of value. Other indicators that are perceived to generate value to some extent are the supplier's image and identity.

The perceived sacrifices are monetary in its character, but have changed from being focused solely on the purchase price towards a focus on total ownership costs. The analysis found that the factors influencing the perceived sacrifices in the recycling/waste management segment were purchase price and costs for maintenance and repairs, fuel and poor performance.

We found that the buying behaviour in the recycling/waste management segment differs depending on the organisation and the situation. However, the buying behaviour is the same in certain aspects as the organisations go through similar purchase processes due to the influencing factors. To get an understanding of the buying behaviour, we studied the factors influencing the buying process. One of the most influential factors in the external environment is the legal environment or the strict laws that regulates the industry. The legal changes come frequently and force the waste management organisations to adjust their activities and, consequently, the machines and applications. As a

result, the legal factors influence the buying behaviour and our interviews showed that this knowledge is limited in Volvo CE. The legal environment is also affecting the purchase process in public organisations due to regulations regarding public procurements. The public opinion is shaping the process for waste management organisations, as it requires the waste handling as environmentally friendly as possible.

The organisation and the buying centre greatly influence the purchase process. A hierarchal organisation considers task oriented factors more than waste management organisations with a flatter structure. Larger organisations tend to purchase in a more standardised procedure in comparison to smaller organisations. Another factor influencing the purchase process is the number of members in the buying centre, where several members affect and are affected by each other and disagreements can arise. The individual decision maker is the final element shaping the buying process and the person's perceptions and character are crucial. We found that the purchase process in the waste management industry is also affected by the products characteristics, as it is a large investment. The last important factor influencing the buying process is the relationship between the seller and the buyer, where the buyer is seeking trust and commitment.

Positioning concerns Volvo CE ability to design its image and value offer to make the customers understand where the company stands in the minds of the customers. Volvo CE wants to have the position of a solution provider in the recycling/waste management segment and this may require a coordination of activities between the product companies together with a wider product range.

We found that the customers' perception of Volvo CE's position did not coincide with Volvo CE's own perception of its position. According to Volvo CE, its only satisfactory factor in the recycling/waste management segment was productivity. Our study did not support this perception, as the customers had a more positive view. The product related factors of productivity, safety, durability and ease of use contribute to Volvo CE's uniqueness in this segment. However, the service related factors, which are increasing in relative importance to product related factors, did not hold a good position for Volvo

CE. Our findings also show that the customers have the perception of Volvo CE being believable, even though mostly related to product related factors.

In order to become more customer focused through a market segment oriented organisation, a company must consider how customer-perceived value is generated in each segment. By looking at how value is generated, the customers' buying behaviour and the company's position in each segment, a company can tailor its marketing and sales strategies toward the customers' needs.

After answering our main problem, we present our theoretical conclusions in the following section.

6.2 THEORETICAL CONCLUSIONS

During the analysis of the empirical evidence, we used a theoretical framework based on our theoretical study. The usage of the theoretical framework when answering the main problem and the research problems, provided us with conclusions for this framework.

Out of the analysis and the usage of the theoretical framework we have developed a theoretical structure called "*the VOP framework*". This new framework can be employed by companies in the heavy manufacturing industry to become more customer focused in the process of market segment implementation. The VOP framework can be utilized as an instrument for understanding how customer-perceived value is generated in a specific segment and bring this information back to the organisation. Thereby, marketing and sales activities can be tailored to fit the segment's needs.

6.2.1 VOP FRAMEWORK BACKGROUND

To become fully customer focused, companies must understand how value is generated within each individual customer organisation. Even though a complete understanding of every customer's needs is the ideal case for a company, it is rarely the reality for companies in the heavy manufacturing industry. A helpful step towards becoming more customer focused is to group customers into segments based on their similar characteristics. The results of

this action provide the company with an understanding of the wanted customers and they can utilise this information in developing and structuring their marketing and sales activities.

Our theoretical contribution to this discussion lies in the implementation process of the market segmentation. To understand our framework we have to explain the process of integrating market segmentation in the organisation in order to become customer focused, since our contribution to the theory is a part of this process. In other words, a company can use this framework only if the company has reached a certain stage of the process.

In the theoretical background, we described a seven-step process of how a company can move from being product oriented to become customer focused working with a market segmentation approach in all processes in the organisation. The first step of the process is to understand the importance of being customer focused. In the next step, the company has to understand that integrating market segmentation into the organisation is a fundamental step towards becoming customer focused. During the third step, the company executes the actual segmentation, which means that customers are divided into certain groups based on similarities. These similarities can be measured through numerous variables and compositions of variables. After segmenting the market, the company should select those segments that are of most valuable. In the fifth step, the company concentrates on how the customer-perceived value is generated in the selected segments. Our contribution to the process starts at this step, which is discussed more in detail below. During the sixth step the company creates strategies to meet the customers' needs with offerings that create high perceived value. In the final step, the company gathers feedback and re-evaluates the process.

6.2.2 THE VOP FRAMEWORK

We have chosen to call our theoretical contribution *the VOP framework*, after its three components Value, Organisational buying behaviour, and Positioning. It starts at stage five in the market segmentation process, as described above.

Our framework offers a company the possibility of getting an understanding of how customer-perceived value is generated in the different customer segments. As a result of this new knowledge, the company can enter the sixth step and develop marketing and sales strategies that satisfy the customers' needs, wants and behaviours.

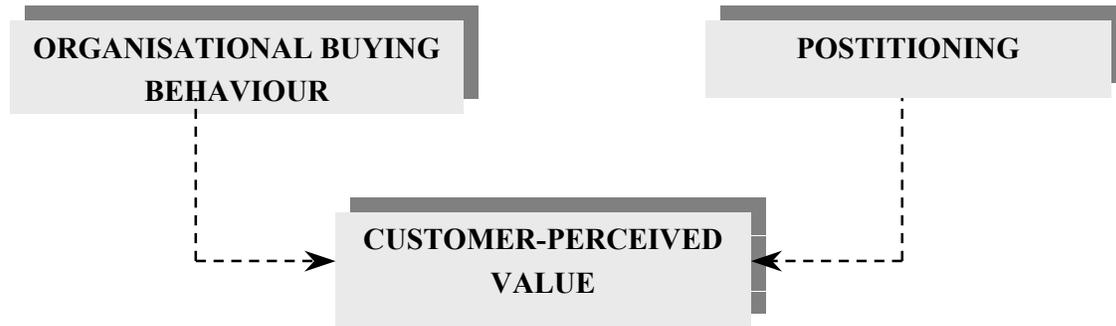


Figure 9 Customer-perceived value and its influencers. Source: own

The framework is based on our definition of customer-perceived value, “*The trade-off between the multiple benefits and sacrifices of a supplier’s offering, as it is collectively perceived by the key decision makers in the customer’s organisation, taking into consideration the supplier’s position in the mind of the customer*”. This definition, composed by the three theories of Value, Organisational Buying Behaviour, and Positioning is illustrated in Figure 9. The concept of value is the foundation of customer-perceived value, while the organisational buying behaviour and positioning are influencing factors. To get a thorough understanding of the framework, we will first describe the three parts individually before discussing the customer-perceived value composition.

6.2.2.1 Value

As described, value is the foundation of customer-perceived value. Generating value for customers is of great importance for a company operating in industrial markets as it can become a competitive advantage. A company that understands the concept of value and can utilise this knowledge in its own activities and can provide solutions to the customers and create the wanted value. We define value as Monroe (1991) does, thus the ratio of perceived benefits relative to perceived sacrifices (see Figure 10).

		<ul style="list-style-type: none"> • <i>Physical attributes</i> • <i>Service attributes</i>
Value =	$\frac{\text{Perceived benefits}}{\text{Perceived sacrifices}} =$	<ul style="list-style-type: none"> • <i>Other indicators of quality</i> • <i>Total ownership costs</i>

Figure 10 Value components. Source: own

Perceived benefits include a combination of physical attributes, service attributes and technical support available in relation to the particular use of the product, as well as other indications of perceived quality. Perceived sacrifices, on the other hand, involve all the costs the buyer faces when making the purchase: purchase price, acquisition costs, transportation, installation, order handling, repairs and maintenance, risk of failure or poor performance.

6.2.2.2 Organizational Buying Behaviour

As discussed above, value is generated by the relationship between perceived benefits and perceived sacrifices. This perception is in the mind of the customer organisation. An important reflection is therefore who in the buying organisation that has the perception of value and what that person is influenced by. As a result, organisational buying behaviour affects the customer-perceived value, as a company needs to understand how and why a customer reacts in a certain way in a buying situation. It is, therefore, important to realise the factors that influence the buying behaviour from both inside and outside the organisation. Even though each buying situation is unique, organisations tend to go through similar patterns in the buying behaviour.

The basis of organisational buying behaviour is the purchasing process, which consists of the stages a buying organisation goes through during a purchase. The purchase process includes eight stages: need recognition; determining characteristics; establish specifications; identify potential sources; request proposals; evaluate proposals and select supplier; establish order routine; and finally, performance feedback and evaluation. However, the purchase process

looks different as it is influenced by varying factors. An understanding of these factors might provide the company with the knowledge to foresee the purchase process.

During our theoretical study, we identified nine factors influencing the purchase process from a number of researchers (see Figure 11). As these factors affect the purchasing process from different levels, we divided the factors into three tiers. The first tier includes those factors that shape the process within the organisation. This first tier consists of organisational traits, product traits, group traits, individual traits and conflict traits and these affect the purchase process. The second tier is on the edge of the organisational boundary and affects the first tier. This means that the second tier is present both within and outside the organisation, thus more outside the organisation as it includes seller traits, informational traits and relationship traits. The last and third tier is located outside the organisation and consists of the environmental traits, which have an effect on the second tier. Within each tier, the traits affect each other and first tier factors can also have an effect on the second tier.

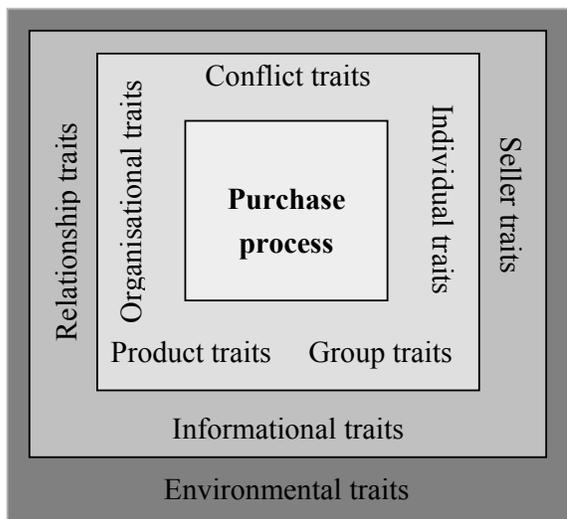


Figure 11 Influencers on the purchase model. Source: own

6.2.2.3 Positioning

A company is positioning itself when designing its identity and value offer in a way so that the customers within a segment understand and realise where the company is standing in the customers' minds. To be able to do so requires

knowledge about the company's position in the minds of the customers and how it wants to be positioned in the future.

We see positioning as a marketing tool. The reason is that the gap between the existing position in the customers' minds and the wanted position can only be closed through evaluating marketing and sales activities and rearranging them according to the wanted position.

An effective positioning statement should include three interconnected requirements: *uniqueness*, *importance/desirability* and *believability*. The company should be striving to meet these requirements in order to fill the gap. Uniqueness is one of the basic principles of positioning as the company has to be extraordinary in the minds of the customers. However, the position cannot be unique if the customer does not perceive it as important or desirable. The last requirement is that the company's position must be believable or else it will not have any affect.

As we have discussed the three individual parts of our framework, we put the components together to a model in the next section.

6.2.3 THE VOP FRAMEWORK MODEL

After discussing the three components of customer-perceived value, we have combined them in a model, the VOP framework model (see Figure 12). It is not the three parts separated that makes the VOP framework distinctive, it is the combination of the three parts.

This framework can be used by a multinational company operating in a heavy manufacturing industry in step five of the seven-step process to become customer focused. By employing the framework to its own organisation and to a specific segment, a company can identify how customer-perceived value is generated in the specific segment. After understanding how customer-perceived value is generated in the segment, the company can optimise its marketing and sales activities by tailoring its segment specific strategies according to the knowledge.

The VOP framework model consists of a complete set of factors that should be considered during the analysis of a segment's customer-perceived value. Each study will reveal different findings, as each customer segment is unique in its character and requirements. In other words, the model's composition of factors will be specific for each segment. This is the essence of the VOP framework model - to find a segment's exclusive composition of factors, which can assist the company in tailoring its marketing and sales activities.

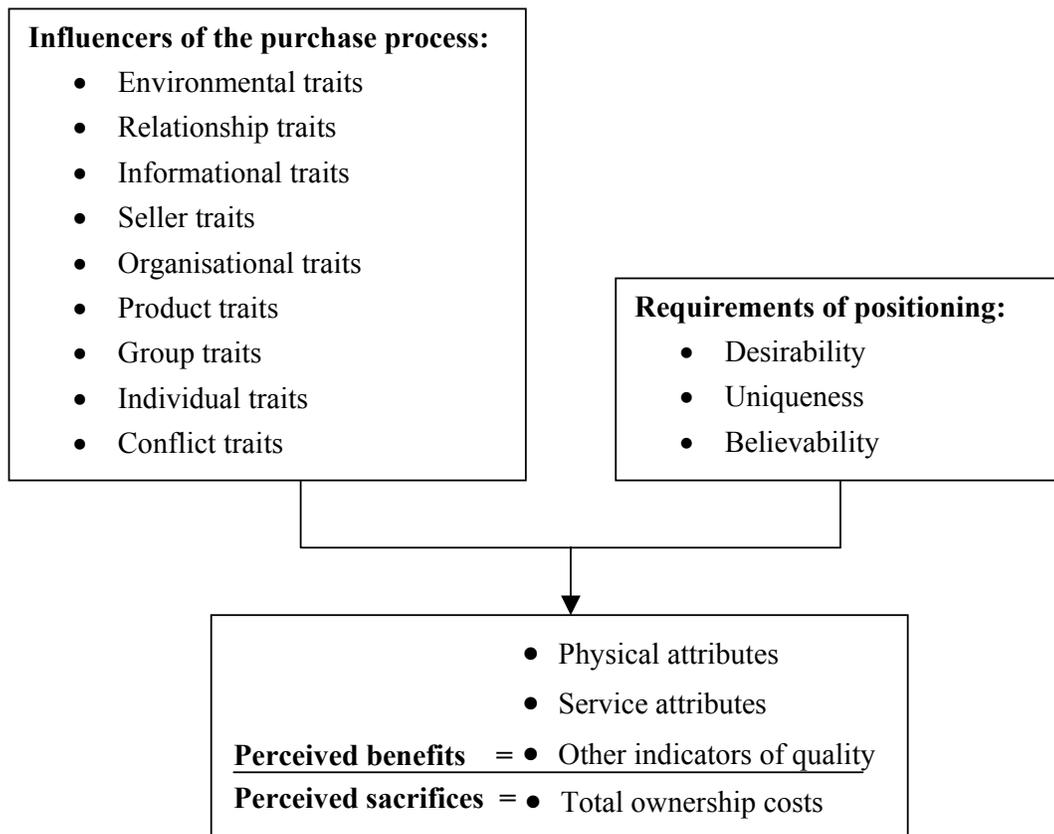


Figure 12 The VOP framework model. Source: own

The last part of the conclusion chapter concerns findings relevant for the case company but not supported by the theoretical framework in this thesis. Even though these findings did not contribute to the theoretical conclusions, they are of interest for the case company.

6.3 CONCLUSIONS OUTSIDE OF THE STUDY

During the empirical study and the analysis we discovered an additional finding that could be of interest for Volvo CE. However, this factor was found outside of our intended study and therefore not supported by our theoretical study. We can only evaluate this finding on a general level outside of the intended study. Below, we illustrate the result and invite further discussion for the recommendations in the next chapter.

6.3.1 ORGANISATIONAL STRUCTURE

An important aspect in becoming customer focused through market segmentation is the organisational structure. The current organisation in Volvo CE is, as mentioned earlier, divided into six product companies and geographically structured marketing and sales companies. Even though not supported by our theoretical study, we believe that Volvo CE's organisational structure could be modified to better fit a segmentation approach.

Segmentation is about dividing its market into customer groups with similar characteristics to be able to better satisfy their needs. Volvo CE's current organisation is not structured according to customer segments towards the commercial organisations (the dealerships) or the end consumers, which may impede complete value generation for the company's customers. Our interviews with waste management customers have shown that customers' perception of how suppliers create value for them is related to how they perceive the supplier's ability to provide a total solution for their needs. In order for Volvo CE to treat the customers properly in the recycling/waste management segment, the company might have to change organisational structure to one that better supports a segmentation approach.

After the conclusions, we present our recommendations for Volvo CE, which were found both inside and outside of the intended scope of the thesis.

7 RECOMMENDATIONS FOR VOLVO CE

This chapter provides our case company with recommendations on how to become more customer focused through a market segment oriented organisation. This section is divided into three parts. The first part presents recommendations based on the analysis, while the second part deals with recommendations not supported by our theoretical study but solely based on findings outside the intended study. The last part of this chapter has a visionary character of the recommendations and gives our opinion of where Volvo CE should be heading, in order to successfully implement a customer focus.

We have identified eight recommendations for Volvo CE to become more customer focused through a market segment oriented organisation. These recommendations are:

- Segment marketing and sales activities
- Segment product development and planning
- Create segment manager positions
- Form segment forecasts
- Develop forums
- Create product partners
- Adjust the organisational structure
- Create segment divisions

Below, we present the recommendation more in detail in its right context. The first six recommendations are based on the analysis, while the last two recommendations are found outside the scope of the study.

7.1 RECOMMENDATIONS WITHIN THE SCOPE OF THE STUDY

7.1.1 SEGMENT MARKETING AND SALES ACTIVITIES

The central reason behind grouping customers into segments is to get an understanding of their specific needs, wants and behaviours and thus be able to more efficiently satisfy the individual customer. However, it is not always easy

to utilise this information within the organisation to increase the value for the customers.

To create the wanted position of being a solution provider, the marketing and sales activities within Volvo CE should be rearranged. These activities have to become more customized for the customers. The reason is that a customer in the waste industry does not want to be perceived as a wheel loader customer or a motor grader customer, but as a waste management customer. Consequently, a customer in the waste management industry has no use of offerings or commercial materials that is not relevant for its own business.

A solution for Volvo CE could be to bundle offerings to fit the different segments. As the few attempts within the company that have been done to bundle the offerings have been made on a local level, but this knowledge has not been gathered. Brochures and catalogues can be transformed from being product based to become segment based. In other words, the marketing materials should include all products and applications a waste management organisation is using in its operations. As a result, the material becomes directed towards the customers' needs and not towards the products as it is today. An example of how to improve an existing marketing activity is the Volvo CE homepage, which today is structured according to products. A recommendation could be to organise it by segments, since an existing or a potential customer does not visit the homepage to look for a product, but for a solution for his/her specific needs.

Volvo CE's sales campaigns and product demonstrations could be more segment oriented. Product demonstrations could be adapted to the customers' industry activity. This implies that a demonstration should include those machines and applications that can create value for the customer. Regarding the sales campaigns, these can be directed towards certain segments. For instance, a campaign can be focused on the recycling/waste management segment and thus highlight this segment for a period of time. As a result, the customer will perceive Volvo CE as able to offer a solution concept instead of just products and services.

An interesting aspect of bundling marketing and sales activities for Volvo CE in the recycling/waste management segment is the possibility of cooperating with Volvo Trucks. This is an excellent opportunity for Volvo CE in the waste management industry as Volvo Trucks has identified a segment called Distribution and Waste. Consequently, this could mean that Volvo CE together with Volvo Trucks can offer a package of products and services for waste handling and waste distribution, which would be unique in this industry. No other competitor can offer a range of products that includes trucks in the segment, which are important products for several waste management organisations. Volvo CE thus has an opportunity of providing solutions for customer needs that no competitor can, if the company does not limit its offerings to the own product range.

We do not recommend Volvo CE to try to change the dealership and its sales people's structure in sales activities. We believe that it is important to keep the sales people geographically bounded for two reasons. First, having sales people working towards segments will expand their geographical market, i.e. they may have to cover a larger district with fewer customers. Second, a larger area will give the sales people less time to spend with the customers, which is one of the most important activities in creating and maintaining strong relationships.

As the dealers, and especially the sales people, have a good understanding of the market and the customers, it is important for Volvo CE to collect their knowledge, but also to support and train the sales people concerning Volvo CE's segmentation approach. The dealers and the sales people must be trained to work in the same way as Volvo CE with a segmentation approach. The bundling of marketing and sales activities has to be carried out by the people who actually meet the customers.

For all the marketing and sales activities to be more efficient, the different product companies have to be coordinated. We have suggested recommendations for how this can be organised in the next part of this chapter, Section 7.2, as this is outside the scope of our intended study. The coordination is going to demand a great deal of effort and most importantly a willingness to change from the product companies. The product companies must have the

cooperative motivation, otherwise it will be hard to incorporate into the organisation.

7.1.2 SEGMENT PRODUCT DEVELOPMENT AND PLANNING

A shift to a market segmentation approach will not only influence marketing and sales activities, but also other processes in the company. Product development and planning are closely interconnected to marketing and sales activities and will also be affected by the implementation of a market segmentation approach.

Today, product development and product planning is not conducted by looking at segment needs. Since there is limited collaboration between the product companies concerning product development and planning, the company's ability to provide solutions customized for each segment's specific needs is restrained. Without collaboration and a segment need approach in product development and planning, the company is able to offer superior products but not solutions to a segment's total needs.

The product companies thus must realise that they are not just producing products and service - they are providing solutions for different markets. This is important for the product companies to understand, but in certain situations can be hard to realise in an engineering dominated company such as Volvo CE.

7.1.3 CREATE SEGMENT MANAGER

To coordinate and structure the segment activities within Volvo CE it may be necessary to create a 'segment manager' position for each priority segment. This person will have an important role in the implementation and continuing process of the market segmentation. The segment manager will become the 'spider in the web' between Volvo CE, the dealer and the customers.

The person positioned as the segment manager must have a great deal of knowledge and understanding of the specific segment before appointed. This indicates that the person has to have a long experience in the specific industry and be well acquainted with the actors. At the same time, the segment manager has to have a good understanding of the construction equipment industry,

although it is not a definite prerequisite. It is more important that the segment manager has a very good understanding of the specific segment.

One of the most important roles for the segment manager is to develop and bring a steady flow of information from the customers back into the organisation. The market information that is gathered by the sales people should be systematically collected and transferred to Volvo CE's organisation. The segment manager should be a part of collecting and coordinating the information to the different areas of the organisation.

The segment manager also becomes the coordinator of Volvo CE's marketing and sales activities. The person will have the ability and knowledge of how to approach the specific segment. As the product companies' marketing activities within Volvo CE are separated, the segment manager has the task of organising these activities to become one entity towards the customer segment.

7.1.4 FORM SEGMENT FORECASTS

To predict the future buying behaviour of the segment's customer, Volvo CE needs a segment oriented forecasting process. The purpose of the segment forecast is to foresee the changes in the customers' needs, wants and behaviours in the segment and make use of this in customising products and services and providing solutions. Consequently, the forecast will be employed in the organisation's current planning systems. The forecast will be a perfect complementary tool in the product and service development in the organisation. Another area where the segment forecast could be highly utilised is the marketing development. Both these development areas are sensitive to future movements and the forecast may be able to predict certain parts.

The forecast should be based on factors influencing customers in the recycling/waste management segment, especially the legal environment. The segment manager must be informed about the legal circumstances in the markets for which he/she is responsible. This requires that the person is continuously updated with information on the local, national and supranational level. The assignment requires that the segment manager has the ability to see the business from a customer perspective.

The forecast should be continuously updated and as soon as important changes occur. As the development of the laws and regulations is rather quick, it is important to keep the forecast from being outdated. This makes it possible to predict future situations based on historical data.

7.1.5 DEVELOP FORUMS

In a large organisation such as Volvo CE, it is important to have information from all aspects, but this information is hard to gather. Volvo CE needs information and inspiration from several perspectives to get a better understanding of the customers to be able to meet the customers' needs, wants and behaviours. Forums could contribute to the segment forecast discussed above. A problem for larger organisations can be that they use information from one perspective, their own, and this is the reason for becoming simple-minded.

To bring in more perspectives and opinions into planning and decision making in Volvo CE could be to create a forum. Forums generate valuable discussions about the regarded topic, which gives Volvo CE the ability to capture trends and movements in the market from persons inside and outside of the organisation. This mode of discussion is a method of evaluating its own future perspective, as Volvo CE is able to either confirm its own thoughts or realise how the company must change its way of thinking and acting.

The forum could concern the areas that are of most importance for Volvo CE. As this discussion will develop a deeper knowledge about the waste management industry and the customers, Volvo CE can take advantage of this in product planning, marketing and sales activities. The dialogue can be on a general level or a more specific level and on the near or far future depending on the subject.

An important question is who the members of the forum should be. The answer is to include as many as possible representing different perspectives without losing efficiency. The forum could involve product and service people from the product companies, representatives and salespeople from the dealer,

customers, the segment managers, analysts, partners, marketing people and other possible representatives. This will cover the broad spectrum of opinions.

The forum could be held once or twice per year to really put pressure on making the meetings successful and intensive. The forums should not be held on several occasions in a year as this could hollow out the meetings. It is better to focus on a few forums with the right people than having several forums with the wrong people. Volvo CE can decide what the subject of the meeting is going to be and invite the right people based on the subject. For instance, “*at this forum, we really want to learn more about the recycling and waste management industry*”.

7.1.6 CREATE PRODUCT PARTNERS

A dilemma for Volvo CE in the recycling/waste management segment is the incomplete product range. Together with exclusive dealership, it could limit the company from becoming a solution provider and meet the customers’ needs, wants and behaviours. If Volvo CE were able to deal with additional product groups, it would create an ability to approach the customer in a more efficient way.

The solution to the dilemma could be to partner with another supplier that is able to provide products that Volvo CE does not manufacture. This means that Volvo CE will have the ability to bundle products for the customer and, therefore, satisfy the customer needs. Volvo CE will then sell competing companies’ products, which may be hard to see the benefits of from an engineering point of view. From a commercial point of view this, however, means that those sales would generate sales of Volvo CE’s products. In other words, “*...it is still better than getting no Volvo sales at all*” (Chris Rees, October 18, 2001).

The partnership with another supplier may also act as a strategy for evaluating the attractiveness of the partnered business. Volvo CE can use the information to decide if the partnered business is profitable or not. If the business is not profitable, Volvo CE continues to partner and let the other supplier provide the products. If the business is, on the other hand, profitable Volvo CE has two

alternatives. First, Volvo CE can end the partnership and decide to start producing the products. Second, Volvo CE can acquire the partner and integrate the company in its own company.

Another factor related to this dilemma is the dealer's exclusivity of spare parts. The service in this industry is vital for the customer and consequently for Volvo CE. A non-functional machine may be very costly for certain customers and a quick service is therefore important. The availability of spare parts is often a crucial part of fast service and support. The objective from Volvo CE's side should be to be as fast as possible when serving a customer in trouble with or without Volvo original spare parts. To create more effective service for the customers, Volvo CE could allow other brands to provide spare parts.

The important factor for Volvo CE is not to sell Volvo original spare parts but to efficiently serve a customer who has problems. This may mean selling competitors' spare parts. Nevertheless, the relevant issue is that the customer's operations are running.

7.2 RECOMMENDATIONS OUTSIDE THE SCOPE OF THE STUDY

The following recommendations are findings that emerged during our field study but are not part of the intended study and thus not supported by our theoretical study. They are solely based on our own interpretations and conclusions from our study. They are included in the study since we believe they could be of interest for our case company.

7.2.1 ADJUST THE ORGANISATIONAL STRUCTURE

The organisational structure within Volvo CE is not really supportive of a segment-oriented approach. However, it is not the existing division of product companies that could prevent the segmentation implementation, it is the lack of cooperation and coordination between them that could prevent the implementation. Instead of merging or reorganising the product companies, we suggest that the different product companies should continue to exist but work closer with each other and as an entity towards the customers.

The existing structure within Volvo CE supports the product expertise and knowledge regarding the products groups. This is an important issue to consider as a total internal organisation based on the segmentation could weaken the concentration of the product know-how. This could, in turn, make the product quality and innovation ability within the product companies poorer.

7.2.2 CREATE SEGMENT DIVISIONS

To create the optimal cooperation and coordination between the product companies and the market, a suggestion we make is that Volvo CE in future reorganisations of the company considers to incorporate segment divisions into the organisation. Each high priority segment could have its own division, which will be responsible for the segment's specific customers.

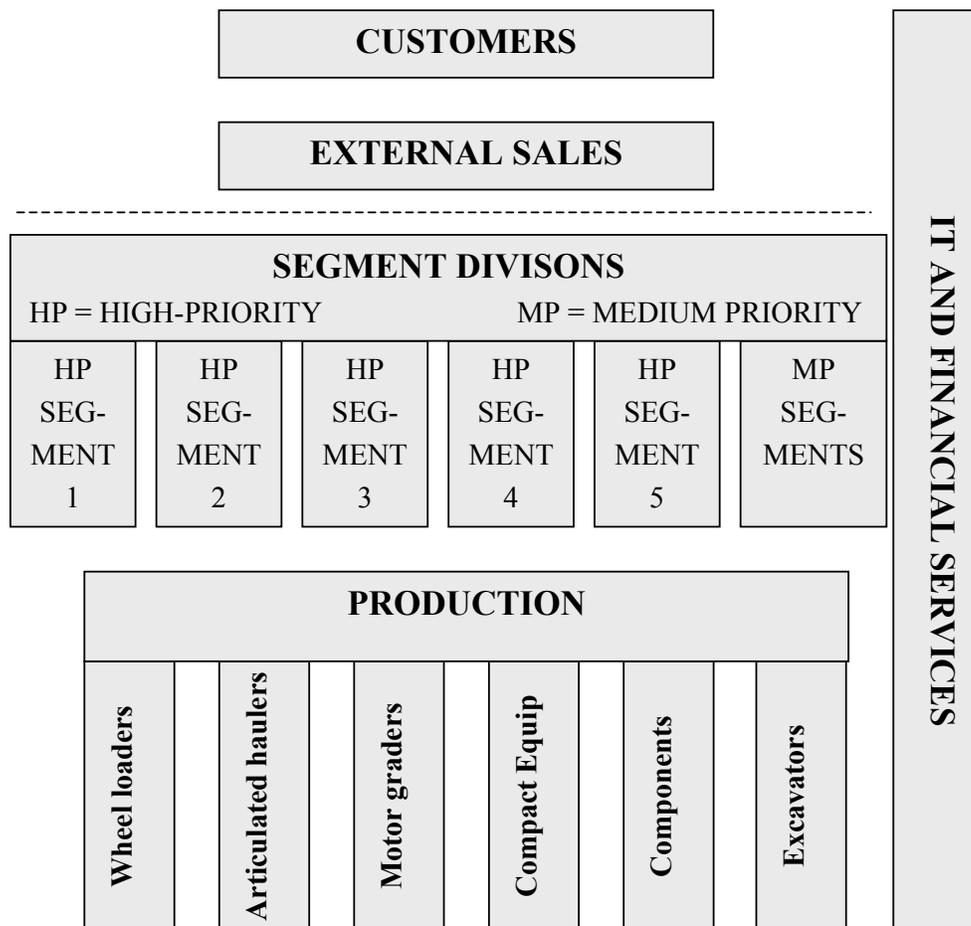


Figure 13 Illustration of a market segmentation orientated organisation. Source: own

As Figure 13 illustrates, the divisions will be located between the product companies and the dealer. As a consequence, the segment divisions become the product companies' contact with the dealers and the customers and vice versa. The segments that are not classified as high-priority segment could have one segment division of their own. If one of the segments is re-evaluated to be a high-priority segment, it might have a segment of its own. The segment divisions' main assignments will be to provide information for the product planning and development and also coordinate the marketing and sales activities.

This illustration is only thought to be illustrative and it must be realised that it does not take into consideration all functions in the company, such as management and administration. Also, it does not consider the future roles of today's sales companies, whether they should remain as they are today or become part of the segment divisions. The intention of the illustration is to provide the company with a visionary image for future organisational restructuring projects how it should more segment oriented with customers' needs in focus.

7.3 VISIONARY RECOMMENDATIONS

The recommendations discussed above are of great importance for Volvo CE. To become totally customer focused, these recommendations are however minor steps. The vision for Volvo CE is to become a solution provider in a market segment oriented organisation and the long-term perspective is the standpoint behind the following recommendations.

The organisation should be structured as recommended above with product companies and segment divisions. The segment division should be involved in the decision making process for the product planning in the product companies in order to succeed. The divisions will have the expert knowledge about the market and the customers' needs, wants and behaviours and they will therefore have the understanding of how to create value for the specific segment.

The internal competition and patriotism has to vanish in order to successfully implement segmentation in the organisation. In a long-term perspective, this

could erode through education and maybe a more vibrant exchange of people between the product companies.

Volvo CE should consider having a complete product range in the high priority segments to be able to approach the large customers with total solutions, but not necessarily by manufacturing everything itself. The company must become proactive and aggressive to acquire and partner with other companies in the construction equipment industry.

In our study of Volvo CE and the usage of our theoretical framework, a number of implications for further research evolved. These are presented in the last chapter of our thesis.

8 SUGGESTIONS FOR FURTHER RESEARCH

During the analysis of Volvo CE and the empirical evidence, we came across several implications for further research, both theoretical and practical. We believe that further research in these areas would develop and deepen the understanding of the studied subjects.

Due to the complexity and the human interaction of organisational buying behaviour it is difficult to measure and evaluate the buying behaviour. Even though factors that affect the organisational buying behaviour are possible to identify, it is problematic to determine how much the factors influence the purchasing process and each other. To get an understanding of how much different factors influence the buying behaviour, a company could consider the most influential factors when developing strategies. It would be interesting for further research to try to find a way to measure the relative influence different factors have on the buying behaviour, since they are affecting the buying behaviour unequally.

A suggestion for further research could be to include the competitors' position in the minds of the customers. In doing so the company could find out where the competitors are positioned and if that is threatening its own wanted position. Positioning requires that the company allocate resources towards the right gap in the mind of the customer at the right moment. Knowing where the competitors are positioned and where they are heading is therefore of importance.

An interesting implication for further research that arose out of our study was to evaluate how the organisational structure is affected by the segmentation approach. As mentioned earlier in the thesis, not much is written about the subject of implementation of market segmentation. This also concerns the organisational implementation of segmentation. Our recommendations how to change our case company's organisation was not supported by our theoretical framework and therefore part of our recommendations outside the scope of our study. It would be interesting to further study the subject how to change the

organisation to better fit a market segmentation approach and base it on a theoretical framework.

We have not been able to evaluate our customer-perceived value framework on other segments within our case company or on companies operating in other heavy manufacturing industries due to time and resource limitations. Such an evaluation could improve the model as it meets new challenges and activities. Applying the customer-perceived value framework on other segments and companies could also prove its contribution to the marketing and sales activities within an organisation.

There are other ways possible to segment the market apart from the way Volvo CE has chosen. The implementation of a market segmentation approach could be time consuming and costly, which shows the importance of conducting and selecting segments accurately. It could be of Volvo CE's interest to have further evaluations made of the company's segmentation in order to see whether the company carried out these first four steps of the process in the most efficient way.

Further research could also be done concerning the costs and benefits that an implementation of market segmentation could cause. It could however be difficult to in monetary terms identify the benefits of a change towards a customer focus. It could for instance be hard to identify what part of an increase in sales that derives from the market segment implementation. An alternative to assess the benefits of an implementation could be to measure customer satisfaction of Volvo CE, for example measuring customer satisfaction before, during and after an implementation of a market segmentation approach in the recycling/waste management segment.

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APPENDICES

APPENDIX A. CUSTOMER QUESTIONNAIRE

Name: _____	Company: _____
Position: _____	Date: _____

A. Buying Decision Factors	B. Relative Importance (rate in %)	C. Perception of Performance (rate 1 – 7, 1 = very low performance, 7 = very high performance)				
		Volvo CE	Compe -titor 1	Compe -titor 2	Compe -titor 3	Compe -titor 4
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
	= 100 %					

D. Total ownership costs comparison: <i>(In percent, Volvo CE = 100)</i>	100 %				
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E. Relative importance between total ownership costs and quality in a buying decision: Total ownership costs: ____ % + Quality: ____ % = 100 %

Competitor 1:	2:	3:	4:
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APPENDIX B. INSTRUCTIONS FOR THE QUESTIONNAIRE

- A.** When buying a product from the construction equipment industry, which are the factors you consider in your decision. A list of examples (of factors) can be found further down on this page. (Please notice that price or total ownership costs should not be included. This is considered further down in the questionnaire.)
- B.** To understand the different factors' importance, could you divide the percentage of importance (100 %) between the factors?
- C.** Please rate the different factors from 1 – 7 (where 1 is very low performance and 7 is very high performance) on how Volvo CE and four other actors perform in those factors influencing your buying decision.
- D.** To compare the total ownership costs, could you position the competitors' total ownership costs compared to Volvo CE, if Volvo CE has a standard of 100 %?
- E.** When you buy, could you please estimate the relative importance/balance between total ownership costs and quality, where quality is found in the product, service, relationship and promotion? (E.g. 50 – 50, 60 – 40 and so on)

Examples of factors influencing the customers' buying decision:

- Productivity
- Environment
- Safety
- Product range completeness
- Coverage of dealer network
- Distance to dealer
- Delivery time and punctuality

- Operator comfort
- Parts availability
- Technical support
- Training
- Product innovation
- Personal relations
- Image/corporate identity
- Product durability
- Finance and warranty packages
- Product modification ability
- Ease of use
- Reliability of company
- Quick service and response

APPENDIX C. DIALOGUE GUIDE FOR CUSTOMERS

1. When buying a product from the construction equipment industry, which are the factors you consider in your decision. (not including the price/total ownership costs)
2. Could you describe the relative importance of the different factors just mentioned?
3. How is Volvo CE performing according to these factors?
4. When you buy, could you please estimate the relative importance/balance between total ownership costs and quality, where quality is found in the product, service, relationship and promotion?
5. Where do you believe Volvo CE is positioned in the market?
6. Do you believe this position is what Volvo CE is striving for?
7. Do you think the position will change in the future and if that is the case in which direction?
8. Which are the most distinctive differences between Volvo CE and its competitors, both in positive and negative terms?
9. In your opinion, what external factors (outside your organization) do you think affect your buying behaviour most?
10. Identify the persons in the company who are involved in the buying process?
11. Which people have the most knowledge and influence in the buying process and who has the final saying?
12. Could you please explain the buying process within the company? (From the initial stage to the actual purchase)
13. Do you interact with the seller during the process? If that is the case when and how are you interacting? Are there any differences between the sellers in terms of interacting?
14. Which criteria are the most important in making a buying decision?

APPENDIX D. DIALOGUE GUIDE FOR DEALERS

1. Describe the different value factors (as perceived by the customer) for a construction equipment purchase in the recycling/waste management segment?
2. Could you describe the relative importance between the factors (as perceived by the customer)?
3. Could you please estimate the relative importance between price and quality in buying-decisions, where quality is found in the product, service, relationship and promotion (as perceived by the customer)?
4. Please rate the different factors on how Volvo CE performs in quality attributes.
5. Who are your customers in the recycling/waste segment?
6. Are these your wanted customers? Who do you want them to be?
7. How do you want the targeted customers to perceive you?
8. Do you believe that the customers perceive you in the right way?
9. How do you design the image and the offerings to fit the customer?
10. Please give your opinion on which external factors (outside the buying organisation) that influence the customer's buying behaviour?
11. Please give your opinion on which internal factors (inside the buying organisation) that influence the customer's buying behaviour?
12. Will these factors change in the future?
13. Could you explain how the order process between Volvo CE and the customers? (From the customer's initiative to the after sale stage)
14. What do you perceive as the most important elements from Volvo CE's side, to influence the customer's buying behaviour and make the purchase successful?
15. Are the competitors doing anything to influence the customers' buying behaviour that Volvo CE is not doing?
16. Could you explain your relationship with Volvo CE?
17. Are there any channels for your sales people to send feedback to Volvo CE?

APPENDIX E. DIALOGUE GUIDE FOR VOLVO CE

1. Describe the different value factors (as perceived by the customer) for a construction equipment purchase in the recycling/waste management segment?
2. Could you describe the relative importance between the factors (as perceived by the customer)?
3. Could you please estimate the relative importance between price and quality in buying-decisions, where quality is found in the product, service, relationship and promotion (as perceived by the customer)?
4. Please rate the different factors on how Volvo CE performs in quality attributes.
5. Who are your customers in the recycling/waste segment?
6. Are these your wanted customers? Who do you want them to be?
7. How do you want the targeted customers to perceive you?
8. Do you believe that the customers perceive you in the right way?
9. How do you design the image and the offerings to fit the customer?
10. Please give your opinion on which external factors (outside the buying organisation) that influence the customer's buying behaviour?
11. Please give your opinion on which internal factors (inside the buying organisation) that influence the customer's buying behaviour?
12. Could you explain how the buying process works between Volvo CE and the customers? (From the customer's initiative to the after sale stage)
13. What do you perceive as the most important elements from Volvo CE's side, to influence the customer's buying behaviour and make the purchase successful?
14. Are the competitors doing anything to influence the customers' buying behaviour that Volvo CE is not doing?