
The capability to understand customer value

- A case study of Metso Mining over continents

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Executive Summary

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Key Words:	Metso, Mining, Customer Value, Customer Focus, Capabilities, Resourced Based View, Blue Ocean Strategy.
Purpose:	The purpose of this thesis is to describe and analyze how the mining equipment producers on a global market manage to handle the changing conditions concerning customer value.
Methodology:	Our approach has been a comparative analysis between two different sites in order to answer the purpose. The case studies at Metso Mining have been made through interviews and visits at two geographical markets, South America and Scandinavia.
Theoretical perspective:	The theoretical framework applied on our empirical findings is based on Blue Ocean Strategy, Customer Value and Resourced Based View.
Empirical foundation:	The empirical foundation is based on interviews with Metso Mining employees at Sorocaba in Brazil and Kiruna/Gällivare, Trelleborg and Staffanstorp in Sweden. Customer empiric has been gathered through a questionnaire in Brazil and through interviews in Sweden.
Conclusions:	The primary activities that serves to understand what brings customer value are to build a high degree of interaction by having offices near the sites. This enables to conduct sufficient service support, create personal relations with customer, update what are offered to the customer and how the price is set towards competitor's price. Aspects to measure in order to stay updated are delivery performance and conducted service assignments with own staff.

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1 Introduction

This chapter strives to give the reader a thorough introduction to this thesis. It begins with a brief background of the global mining market conditions. This follows by a problem discussion that will result in the thesis purpose. Finally, delimitations will be presented before the clarification of the target group is made.

1.1 Background

Since the beginning of the 21st century the minerals and ores industry has boomed because of the increasing Asian demand, especially in China.^{1,2} For example the minerals and ores are needed in order to build roads, houses and railways in all developing countries. The high demand for metals contributes to that the prices are increasing.³ Based on this fact there is no doubt that the mining business is growing which gives the mining equipment producers great opportunities.^{4,5}

A problem that arises with the growth and profitability is that it makes the business more attractive to competitors.⁶ As a result of the growing mining business, Asian manufacturers of mining equipment have emerged. This is a problem for companies that are producers of mining equipment and actions are about to be taken. These companies experience increasing hostility from their new competitors and, due to the temporary upmarket and the current profitability, they feel that it is the best possible time to act.⁷ It is still a matter of continuously improving their machines, but they identify highest potential for future growth within the service and aftermarket segment.^{8,9}

It is noticeable that the external conditions on the mining market are changing and that a lot of the companies are adapting to the new environment. In order to determine which factors that are affecting the market it is important to understand the specific market conditions.

1.1.1 The market conditions

There are significant indications that the conditions on the market are changing and in order to explain this situation a theoretical model is used to enlighten this area. In 1980 Michael Porter introduced a model that is used to describe and analyse the competition on a specific market. The used parameters are the degree of rivalry, the

¹ www.jernkontoret.se, (2007-03-05)

² Blomgren, M., (2007-03-02)

³ www.rmg.se, (2006)

⁴ www.rmg.se, (2007-04)

⁵ Ljungberg, S., (2007)

⁶ Ekström, T., (2007-05-21)

⁷ Kähkönen, M., internal memo, (2006-09-28)

⁸ Mikkilä, S., (2007-01-12)

⁹ Kähkönen, M., internal memo, (2006-09-28)

power of supplier, the power of buyer, barriers to entry and the threats of substitutes.¹⁰

The degree of rivalry

There are a lot of small and medium-sized mining equipment producers but only a few big companies that are world leading on the market.¹¹ Between these big actors there is a high degree of rivalry.¹² At the same time due to a more global world the competitors are mobilising closer to each other and their most important customers.¹³ This means that due to economies of scale some competitors can provide a more cost effective solution, using standardized products and assemblies, and combine this with an extensive service package to a competitive price. This is accomplished partly by outsourcing activities through recognized suppliers who guarantee quality and to supervise and conduct the assembly lines.¹⁴

With lower market prices and sustained quality, some companies will face difficulties keeping their current market share with their present market strategy. It is evident that they will have to compete as a knowledge intensive supplier with high end solutions. At the same time it is important to keep up with the sales of capital equipment in order to initiate and build relations to the customers.¹⁵ The future core activities will be to provide service and lifecycle solution to the customers and participate in the process of how they can improve their business. It is also important for the mining equipment producers to have a strong home market where they can test new products.¹⁶

The power of suppliers

The mining equipment producers have a limited influence over their suppliers due to the range of raw material on the world market. Most of the mining companies have the same suppliers and therefore it is difficult to take substantial actions if a delivery fails or becomes delayed. The demand and production on the market is in such a high pace that it is difficult to meet required amounts.¹⁷ Most of the production has gone towards assemblies and the mining equipment producers buy the raw components and then bring together a solution that suits the customers.¹⁸

The power of buyer

With the increasing demand of ores and minerals the mining equipment producers are facing potential large streams of revenues, which are dependent on the number of buyers. The mining industry is fragmented and consists of many small and medium-sized mining companies. The five biggest companies have less than a fourth of the

¹⁰ Porter, M., (1980), pp. 7-24

¹¹ Ljungberg, S., (2007)

¹² Ekström, T., (2007-05-21)

¹³ Ivansson, L., Johansson, P., Norberg, A., (2007-03-21)

¹⁴ Luiz Junior, W., Petravivicius, C., Gouveia, R., (2007-02-14)

¹⁵ Ivansson, L., Johansson, P., Norberg, A., (2007-03-21)

¹⁶ Ljungberg, S., (2007)

¹⁷ Haapalainen, A., (2007-03-20)

¹⁸ Luiz Junior, W., Petravivicius, C., Gouveia, R., (2007-02-14)

world production, which consists of approximately 1000 companies.¹⁹ This means that there are a lot of buyers that are dependant on a few important mining equipment producers.

The rising demand also contributes to that the mining equipment producers not always are able to supply the buyers with necessary equipment. This may lead to bottlenecks and makes the buyer dependent on the mining equipment supplier.²⁰ Due to heavy financial losses in an unscheduled stop it is important to keep the production running which makes the buyers less price sensitive for spare parts.²¹

The mining equipment producers are of course also dependent on the buyers. The switching cost to another buyer could be considered expensive. This situation has developed a rather intense relationship between the parties and it has become more important for the mining equipment producer to participate in their customer's entire lifecycles. The customers are more interested in suppliers that understand their issues and that are able to help them to improve it in a constructive way.²²

Barriers to entry

The potential entrants are growing because of the booming mining market in South East Asia. Due to the fact that there are a lot of mining companies and a great demand of mining equipment, it is a good situation for new entrants.²³ It is not hard to predict that these players with absolute cost advantages therefore will be able to produce and sell equipment at low prices.²⁴

Also, the mining companies have expressed a desire of additional competitors in order to create a more competitive market. Therefore the barriers of entry are considered to be obtainable. This is something the existing companies are well aware of and the counter strategy is to let new entrants produce the equipment and instead focus on the after market and service which constitutes a lot of money.²⁵

Threats of substitutes

Substitutes are not likely in the present situation. There have been limited improvements that have had a significant influence on the market during the previous 20 years. Some techniques have become more sophisticated but are in reality the same. This indicates that the market will not change rapidly regarding new products or processes that revolutionize the conditions on the market.²⁶ On the other hand, it is possible that substitutes will be created in the future, as a reaction to the high prices of minerals and ores.²⁷

¹⁹ Ljungberg, S., (2007)

²⁰ Ekström, T., (2007-05-21)

²¹ Carlsson, S., (2007-03-30)

²² Ibid

²³ Ekström, T., (2007-05-21)

²⁴ Boscarato, M., Covolo Jr, D., (2007-02-16)

²⁵ Colagrossi, J., (2007-02-12)

²⁶ Ivansson, L., Johansson, P., Norberg, A., (2007-03-21)

²⁷ Ekström, T., (2007-05-21)

Following key issues summarizes the market situation:

- The competition may be divided in two sides, mining equipment producers with low prices and premium knowledge producers with high prices.
- In order to keep their customers, many mining equipment producers are going towards a more customer focused approach.
- The development is going towards a more standardized production but is adjusted through individual assembly lines in order to satisfy the customer's needs.
- Due to existing high prices a lot of companies enter the market as a low price alternative.
- It is not a likely development that the products will change rapidly on the mining market.

Based on the indications of the changing market condition there are tendencies of focusing more on the customer. Customer focus is something that strives to provide added value to customers. Therefore it is of importance for the industry to be able to understand customer value. Problems that may occur of a transition in order to meet future demands will be further discussed in the following chapter.

1.2 Problem discussion

Companies have been forced to move from vertically integrated systems towards supply chain networks, due to the characteristics of modern economies.²⁸ This is an example of how companies have been forced to adapt to a new organisation structure in order to meet the demands of the future. A trend in the mining industry is to change the working structure from product oriented approach towards a more customer oriented approach.²⁹

Organisations became increasingly concerned regarding the financial implications of their customer satisfaction and quality improvements during the 1990s. On the base of the financial justification of customer satisfaction and quality improvement programs, it is the management's belief that higher levels of customer satisfaction and quality would stimulate consumption levels, decrease cost, and allow firms to charge more for their products or services.³⁰ The reason why they can not meet these goals completely today is because of the fact that different customer segments require

²⁸ Seo, D., Desouza, K., (2006), p.1

²⁹ Colagrossi, J., Internal Presentation., (07-01-12)

³⁰ Bolton, R., (1998), p.46

different strategies. They need competitive products to fight the competition but be stronger in customer service to keep their customers satisfied.³¹

The ability to become stronger in customer service in order to keep their customers satisfied is important for any company, but not very tangible. Intangible attributes creates a problem because they are difficult to measure accurately and are often studied throughout linguistic information. When a real-life engineering service or quality problem is being solved, usually an important output appears to be the linguistic information. The information is actually more difficult to measure through a classical mathematical function. For example, the temperature in centigrade of a room is easily measured, but to measure if the temperature is adequate or not is harder.³²

A problem that arises is how to measure the customer's experienced value, which an activity contributes with. Many activities may focus on the customer from the manufacturing company's point of view, though the customer does not appreciate that specific focus. In order to identify what customer focused activities a customer actually appreciates, a customer value survey should be conducted. A problem that will arise is therefore to validate what is defined as a customer focused activity as well as customer value in the mining industry. When defining these it is imperative that they are considered to be representative for the mining segment in general which also will be a problem.

1.3 Purpose

The purpose of this thesis is to describe and analyze how the mining equipment producers on a global market manage to handle the changing conditions concerning customer value.

In order to answer the stated purpose this study tends to identify activities within the company that update what customers consider as valuable. These activities will be evaluated and screened if they are general for the entire mining industry.

1.4 Target group

1.4.1 Orderer

Anders Thulin who is the Senior vice president of Mining at Metso Minerals acts as the primary orderer of this project. He has participated in the development of the purpose and the scope of this study. He has also initiated some essential contacts within the organisation in order to conduct this thesis.

1.4.2 Sponsor at the company

The contact with Metso Mining, has on a daily basis, been Sven Mikkela, Senior vice president of business and development Metso Minerals. The collaboration has consisted of planning the different parts of the study, initiating relevant contacts at the

³¹ Kähönen, M., Internal presentation., (06-09-28)

³² Benítez, J., Martín, J, Román, C., (2003), p 1

sites. Sven Mikkela has furthermore been an invaluable advisor in a lot of detailed aspects of the project.

1.4.3 Concerned Metso Mining employees

Through interviews and visits at the sites, interested parties of this thesis within the organisation has increased. This is due to the qualitative interviews that have stimulated employees to be more interested in this thesis stated problem. Because of this they are regarded as a part of the target group. This includes the Brazilian as well as the Swedish site.

1.4.4 Tutors from University

Through recommendations the chosen tutors became Ingela Elofsson, Production Economy of the Institute of Technology in Lund and Christine Blomqvist at Lund Institute of Economic Research, School of Economics and Management. The tutors' backgrounds and experiences are well suited to the field of interest in this study.

1.4.5 University

This is the final step before the graduation. Therefore, this thesis is written specifically towards the Institute of Technology in Lund and the Institute of Economics at the University of Lund. Another target group is the academic research in general i.e. the entire mining industry. An additional target group is the students at the mentioned faculties, especially the students within the Technology Management program.

2 Method

In this chapter the chosen methodological approach will be presented. The outline of the different sections in the thesis will be described in a logical, but not necessary chronological way, in order to explain how the stated purpose will be obtained. Furthermore, the reason behind the chosen theoretical framework, empiric and models will be explained.

2.1 Choice of method

2.1.1 A case study

A case study means that a minority of object are examined in different respects. It is therefore better to examine a smaller number of cases to get the possibility to do it more thorough.³³ A case study is an adequate method when the object of the study is complex and you want to explain, describe or understand for example an organization.³⁴ This thesis is deliberately based upon one case company, Metso Mining, but the focus will be on two sites that are situated on two different geographically markets. The method was chosen to get a deeper understanding of the situation regarding specific relations and activities, which are performed in the business natural environment.

Another reason to perform a case study is because it is a suitable research method when an organization is during a changing process. The researchers must then get a thorough knowledge about the organization and the people within it. It demands detailed and multifaceted data about the objects which can lead to difficulties to acquire enough empirical data. Because of the researchers lack of experience within the organization and the research area it is difficult to know how to collect the right data, what persons to interview and how to interpret the information. A positive effect of a case study is the possibility to communicate the result in an easy way to others. This is due to the fact that it is about real people and real situations.³⁵

To better understand the link between the case company's actions and the perceived customer focus, a theoretical framework was developed through relevant articles and literature in order to interpret the empirics. This data are structured as a comparative analysis between the two different sites. The reason for this is to link the sites and achieve possible general conclusions regarding the mining business. To handle this comparison the study describes the sites by their physical, historical, social and institutional placement.³⁶

³³ Wiederheim-Paul F., Ericsson L-T., (1991), pp.65-68

³⁴ Backman J., (1998), p.49

³⁵ Wiederheim-Paul F., Ericsson L-T., (1991), pp.65-68

³⁶ Denscombe, M. (2000), p.49

2.1.2 The case company

Until first of January 2007 Metso Mining served their customers through product-based business lines and focused on a limited number of segments. An increasing demand from customers of more involvement from Metso Mining in their operations has been expressed. The customers want to receive better service, technological support and machines. However, Metso Mining's structure limited their ability to focus on the customer segments. In order to meet these demands the company has reorganise from being structured around products towards customers.³⁷

Our orderer, Anders Thulin, was the former president of the business line Wear protection and Conveying. He believes that the reorganisation is a fundamental factor in presenting a united front, but there are activities and processes in the way they do business that could be improved in order to become more customer-focused.

The argumentation throughout this paper will be based upon our stated purpose, that are to describe and analyze how the mining equipment producers on a global market manage to handle the changing conditions concerning customer value. Based on our previous discussion, we will focus on Metso Mining in the South American and the Scandinavian market, in order to evaluate if identified activities are general. Furthermore, Metso Mining's customer focused activities in Scandinavia have been compared with the South American. This study will not focus on the reorganisation itself but on activities that are important in order to continuously update focus on the customer's needs.

2.2 The chosen sites

The sites are chosen on the basis of the purpose of the study. Two different sites in two different continents were chosen in order to gain a global perspective.

The South American site was chosen together with stakeholders at Metso Mining Scandinavia because of the outspoken fact that the South American organisation is performing well regarding customer focus. Due to a natural adaptation to the market Metso Mining South America has been working in the new customer focused structure for four years. Therefore, they have experience in conducting business in a customer focused approach. A customer focused approach is the main subject under investigation and therefore South America was selected due to the global perspective combined with their customer focus. Sorocaba in Brazil was chosen because it is the head office in South America.

The Scandinavian market was chosen based on the statement that it is representative for Metso Mining in general.³⁸ In Scandinavia several offices have been visited due to the fact that Scandinavia's different managers are more geographically scattered. Visits were made in Kiruna, Gällivare, Staffanstorps and Trelleborg. This was done in

³⁷ Kähkönen, M., internal memo, (2006-09-28)

³⁸ Mikkilä, S., (2007-01-12)

order to interview managers in similar positions in Scandinavia as those who were interviewed in South America.

2.3 Information gathering

The thesis is highly dependent on qualitative empirics. Therefore as many interviews as possible have been conducted face to face in Brazil as well as in Sweden. In hard figures this has meant 15 interviewed persons in Brazil and 10 in Sweden regarding company representatives. The information concerning customers' perception in Brazil was gathered through an internal presentation where the customer satisfaction in Brazil has been measured. The Swedish information concerning customers was gathered through interviews based on their two most important customers with three representatives from LKAB and two representatives from Boliden.

All interviews in Brazil took place at Metso Mineral's site in Sorocaba. Additional to the interviews, plants, an assembly factory and a foundry were visited. Interviews in Scandinavia were performed at offices in Kiruna, Gällivare, Staffanstorp and Trelleborg. In relation to these interviews visits were made to a rubber manufacturing plant and mines. As in Brazil impressions and discussions during these visits have been considered as primary empirics.

Articles have been collected through the university's data base. Other published literature has been gathered through libraries and faculty at the university.

2.3.1 Primary and Secondary Data

Primary data is information collected by the authors themselves.³⁹ In this thesis the primary data consists of interviews. The purpose with the interviews has been to explore how the different sites manage to focus on their customers, which have been a substantial part of the interview template. The primary data consists of many interviews in order to gain balance and objectivity in the information.⁴⁰ Impressions and discussions relevant to this thesis cause during these visits have been regarded as primary empirics.

Secondary data is already existing data like literature and articles. It is particularly adequate to use in the beginning of an investigation because it is easier and less expensive to use data that already is collected and documented by others.⁴¹ A weakness with secondary data is that it is not completely adjusted to the specific purpose of the thesis. Therefore it can be difficult to be sure of the usefulness of it. To avoid using the wrong secondary data, it has been carefully collected and investigated to be adequate for the purpose of the thesis.⁴²

³⁹ Lekvall, P., Wahlbin, C., (1993), p. 141

⁴⁰ Jacobsen, D.I., (2002), p. 210

⁴¹ Wiederheim-Paul F., Ericsson L-T., (1991), pp. 76-81

⁴² Lekvall, P., Wahlbin, C., (1993), p.181

The secondary data in this thesis is first and foremost literature and articles as well as general information about Metso Mining. The chosen theory is based on empirical findings as well as prior conducted research.⁴³ The balance between written literature and articles are almost equal but written literature has been used to build a framework on the study while articles often are used to complement a specific subject. Metso's intranet has been used as a compliment mainly to present relevant hard figures.

2.4 Conducting the interviews

This thesis is to a large extent founded on personal interviews. An unstructured interview method has been chosen, which means that an interview guide was created to discuss a number of wide questions during deep interviews.⁴⁴ All the interviews began with a presentation of the interviewers, the background and the purpose of the project and the content. This included a comprehensive description of the topics that would be discussed. An unstructured interview is an explorative form where the wide questions are complemented with a couple of secondary questions keeping the interviewed person on track. The secondary questions were only asked if the person did not answer them spontaneously.⁴⁵

The interview guide was organized with a standardized framework with an individual part based on the different working areas and responsibilities. (Appendix 1) The reason for this design was to get information that could be compared between different persons but also an individual part in order to explore specific knowledge concerning one area. The interviewed people have therefore been able to speak freely concerning their own area of expertise as well as give their opinion to joint questions regarding Metso Mining.

Two or three interviewers have been present during all the interviews, in order to divide the different tasks. In practice this means that one person was responsible for the dialog with the interviewed person and the other ones for taking notes and reading the atmosphere. These roles were on a circulating schedule.⁴⁶ In order not to forget any important information the answers were put together directly after the interviews.⁴⁷

Personal interviews have been performed as much as possible in this thesis. In addition to the personal interviews some telephone interviews have also been made, with people not possible to meet face to face. Telephone interviews are less expensive and faster than personal interviews, but the limitation in time is a disadvantage. It is also difficult to engage the respondent during a long time over the phone.⁴⁸

⁴³ Jacobsen, D.I., (2002), p.153

⁴⁴ Lekvall, P., Wahlbin, C., (1993), p.186

⁴⁵ Ibid.

⁴⁶ Jacobsen, D.I., (2002), p.190

⁴⁷ Lekvall, P., Wahlbin, C., (1993), p.18

⁴⁸ Ibid, p. 187

2.5 Validity and Reliability

In a qualitative study the validity, reliability and objectivity are of great importance. The information received must be reliable and the right decision concerning what to evaluate and if it is relevant for the purpose in question has to be made.⁴⁹

2.5.1 Validity

Validity means to what extent you are measuring what is aimed to be measured.⁵⁰ The validity is strengthened by interviewing people from different areas within the company to get a comprehensive picture of the subject. The persons were informed about the thesis purpose and limitations before the interviews and were therefore aware of the focus on Metso Mining. This increases the probability that the information from the interviews is within the scope of the thesis.

Persons in relevant divisions in the case company were identified together with managers at Metso Mining, Trelleborg, to strengthen the knowledge of the interviewee. Most of the interviewed persons were on a managerial level in order to get a complete picture of a specific business area. Visits in the different departments made it possible to observe how people work and what kind of tasks they were performing.

The validity is also strengthened due to the fact that many interviews have been made and the sessions lasted for one to three hours, which contributed to detailed answers. The direct contact during the interviews made it possible to control the data's relevance and correctness during the time it was collected.⁵¹ Clarifications of the information gathered in Brazil have been conducted via email which also has been considered as primary empirics.

Another important aspect to increase the validity is to see things from different perspectives and the possibility to confirm a result.⁵² This is strengthened by the fact that two or three interviewers have been present during all the interviews. Even if one person was responsible for asking questions the others could complement with additional questions.

The used microstructure framework of a capability, which will be presented in the theory chapter, has been developed by John Gibe at Lund Institute of Economic Research, School of Economics and Management. In order to validate the analytical procedure in this thesis, the result have been discussed and commented by John Gibe.

⁴⁹ Jacobsen, D.I., (2002), p.21

⁵⁰ Svenning, C., Metodboken, Lorentz Förlag, (2003)

⁵¹ Denscombe, M., (2000), p.162

⁵² Ibid, p.103

2.5.2 Reliability

Reliability refers to the level of dependability in the measuring instrument, if the same value is received in repeated measurements.⁵³ There are many factors that can affect the reliability. Examples of these factors are possible errors in the interview guide, the person who asks the questions and the environment where the interview is performed.⁵⁴

Thereafter an interview guide was organized in consultation with the tutors in order to formulate the questions in a way so that errors regarding interpretations would be minimized. The interview guide was a support to get the same kind of information from persons on corresponding positions on the two different markets. The questions were formed in a clear and unambiguous way to increase the reliability.⁵⁵

Another aspect that improves the reliability is that the fact that the group consists of three persons, who all have taken part of the information. This has made it possible to discuss the analysis and conclusions internally within the group. The interviews were also made face to face out at the company, in the person's natural environment.

2.5.3 Objectivity

The thesis is based on the authors' educations and scientific articles. These assumptions therefore make it impossible for this thesis to be fully objective. Also, there is always a possibility that the researcher does not understand the situation or misinterpret given signals.⁵⁶

To be as objective as possible the subject of this thesis has been discussed with other people than the authors. Also, the results of the thesis are well-founded by using acceptable methods. Furthermore, the authors have strived for a neutral analyze and seeing things from different perspectives.⁵⁷

The information in the empiric will be presented as realistic as possible, meaning that subjective statements and conclusions might occur. These will not be altered in to an objective manner in order to provide the reader with as realistic empiric as possible.

2.6 Criticism of our method

2.6.1 The mining industry

Information regarding customer focused activities is something that seldom are shared between competitors or become public. An independent research, from a Swedish authority, on the market conditions has not been conducted since 1996.⁵⁸

⁵³ Denscombe, M., (2000), p.103

⁵⁴ Svenning, C., (2003), p.63

⁵⁵ Lekvall, P., Whalbin, C., (1993), p.214

⁵⁶ Denscombe, M., (2000), pp.42-43

⁵⁷ Wiederheim-Paul F., Ericsson L-T., p.27

⁵⁸ Axelsson, Y., Jernkontoret, (2007-04-18)

Therefore, a more thorough validation of the market analysis based on the case company would have been desirable.

2.6.2 Theoretical framework

In order to identify the customer focused activities within the empirical findings a theoretical framework was chosen. The resourced base view aims to structure the activities and is a useful tool in order to describe the intangible elements, but it is an area that gives the reader a scope for interpretation.

The definition of customer value is based on theory from Wolfgang Ulaga, a Professor of Marketing at EDHEC. School of Management, Lille, France. This is a theory that may be rather unknown for the target group of the thesis but at the same time a model that serves the purpose well.

2.6.3 Empiric

The combination of the outspoken praise of the Brazilian site combined with the impressions at the site itself may constitute a problem, not least due to internal expectations. Also the study is focused on Metso Mining but some of the information regarding customer focus could be considered to involve Metso Minerals in general. This is due to the fact that departments and interviewees responsibilities sometimes cover areas within entire Metso Minerals instead of only Metso Mining.

Another limitation in this report is the denied permission to interview Metso Mining's customers in South America. Instead the information was collected through an internal presentation, where the customer satisfaction from a questionnaire in Brazil is presented. In Scandinavia the customer satisfaction was measured throughout interviews and the received information could therefore vary compared to South American. This may affect a comparison between the customer satisfaction in Scandinavia and South America.

Some weaknesses regarding the validity may be that the interviewed persons had prepared parts of the information they wanted to share, and that they answered the questions as representatives of the company. Another fact that may have affected the result is the language differences which can have caused misunderstandings and wrong interpretations. A way to increase the reliability could have been to interview more persons at the exact same positions, maybe even in other countries.

2.6.4 Analysis

The analysis constitutes of identification and screening of the customer focused activities that serves to understand what brings customer value. This is an area that could be considered to be intangible and as mentioned before an area that leaves room for interpretation. Findings presented in this study are based on the authors' impressions out at the sites, interviews with representative of the staff and the case company' customers.

3 Theoretical Framework

In this chapter we introduce the chosen theory and the theoretical model. Together with the empirical findings this serves as the foundation for our analysis and conclusions. The chapter begins with blue ocean strategy, followed by customer focus and ends with resource based view.

3.1 Blue ocean strategy

The focus of the report is how the entire market is changing from a product oriented focus towards a more customer oriented focus. To determine the reason, it is essential to describe the changing conditions for both the customers and the mining equipment producers on the mining market. Porter's Five Forces gave a comprehensive view in the introduction but it is difficult to interpret the reason for the changing conditions. Blue Ocean Strategy is a modern theory used to interpret why competitive changes occur and how a company best can influence these changes. The possibility to influence a market is a very important aspect in the Blue Ocean Strategy because it reveals the chance to foresee new market opportunities and new way to conduct business. With this theory the thesis strives to describe, throughout a customer's point of view, how and why a company change towards a more customer focused approach and what conditions, that affects the market in this direction, could be influenced.

Blue ocean strategy challenges the traditional way of thinking about strategy by making the competition irrelevant. This theory describes that companies will be successful if they create "blue oceans" of unchallenged market space instead of competing with other companies in so-called "red oceans". With this perspective, the market consists of two kinds of oceans: red oceans and blue oceans. The red oceans are the known market space which symbolizes all existing industries today. The blue oceans are the unknown market space which represents all non existing industries today. In the red oceans where the rules already are set and accepted, companies struggle for competitive advantage. When the space in the ocean is full the profit and growth are reduced. In the blue oceans, however, the market space is untouched and competition is irrelevant because the rules of the game are not set.⁵⁹

3.1.1 Value innovation

Blue ocean strategy focuses on *value innovation*, which is primarily about increasing the value for the customers. Value innovation is explained as:

*"Instead of focusing on beating the competition, you focus on making the competition irrelevant by creating a leap in value for buyers and your company, thereby opening up new and uncontested market space."*⁶⁰

⁵⁹ Chan Kim, W, Mauborgne R., (2005), pp.3-22

⁶⁰ Ibid, p.12

The table below describes the differences between red and blue ocean strategies.

Red Ocean Strategy	Blue ocean Strategy
Compete in existing market space.	Create uncontested market space.
Beat the competition.	Make the competition irrelevant.
Exploit existing demand.	Create and capture new demand.
Make the value-cost trade off.	Break the value-cost trade-off.
Align the whole system of a firm's activities with its strategic choice of differentiation or low cost.	Align the whole system of a firm's activities in pursuit of differentiation <i>and</i> low cost.

Table 1. Red Ocean Strategy versus Blue Ocean Strategy⁶¹

3.1.2 The framework⁶²

By breaking the trade-off between differentiation and low cost, “The Four Actions Framework”, can be used to challenge an industry’s business model.

The framework consists of four questions:

- **Which of the factors the industry takes for granted should be *eliminated*?**
The first question is about eliminating aspects that companies within an industry have competed with during a long time. These factors are often taken for granted even though they no longer have value.
- **Which factors should be *reduced well below* the industry standard?**
The second question makes you consider if products and services have been over designed in order to over win the competitors.
- **Which factors should be *raised well above* the industry’s standard?**
The third question is about discovering and reducing the compromises the industry constrains the customers to make.
- **Which factors should be *created* that the industry has never offered?**
The fourth question forces you to find new sources of value for the customer, create new demand and change the strategic pricing in the industry.

To sum up this theory blue ocean strategy is about creating uncontested market space and make the competition irrelevant. To analyze the mining market from this perspective the four action framework will be used by eliminating, reducing, raising and creating different factors to attain blue oceans and value for the customer. In following part customer value will be described.

⁶¹ Chan Kim, W, Mauborgne R., (2005), p.18

⁶² Ibid, pp.29-37

3.2 Customer value

When the changing conditions regarding customer focus has been established it is important to have a valid definition of customer value. The reason for this is that the activities, within the company, aimed on creating customer value get a higher degree of validity if they are measured against a recognized theory in this area. Ulaga's theory to describe customer value serves this well and throughout this model the empirical findings regarding customer value will be sorted in a structured way.

An important way for a supplier to make a distinction from the competitors is through superior customer interactions. It is therefore of significance for a supplier to understand how they can create and bring value to the customer in a business-to-business relationship.⁶³

The importance for a supplier to add value to the customer can be explained by following quotation of Butz & Goodstein:

*"The more a producer adds value to a product or service, the more distinctive that product or service becomes to the customer. This in turn can lead to higher prices and presumably, higher margins and greater profits"*⁶⁴

3.2.1 Definition

The literature contains many different definitions of customer value and following definition has been chosen in this report:

*"Customer value is the emotional bond established between a customer and a producer after the customer has used a salient product or service produced by that supplier and found the product to provide an added value."*⁶⁵

This emotional bond contributes to that the customer purchases continually from the supplier and also recommend the supplier to others. To create this kind of bonding the whole organisation must be entirely customer focused and frequently meet the customer expectations. If the company focus on customer service and do it well, the bonding will come by itself.⁶⁶

3.2.2 The framework⁶⁷

Wolfgang Ulaga, a Professor of Marketing at EDHEC. School of Management, Lille, France, has written an article that is based on research within literature on relationship value and ten in-depth interviews with purchasing managers in nine different

⁶³ Ulaga.W., (2003), p. 667-693

⁶⁴ Butz,H., Goodstein, L p. 63

⁶⁵ Ibid

⁶⁶ Ibid, p.65

⁶⁷ Ulaga, W., (2003), pp. 667-693

manufacturing companies. He creates a framework that focus on the customer value in a business-to-business context.

Eight categories of value in business relationships, from a customer perspective, were identified by Ulaga. These dimensions are described below:

1. The first dimension is *product quality* which is a key driver of relationship value. The most important aspect for a manufacturer to have a relationship with a supplier is to acquire products and services. It is difficult for the suppliers to distinguish from the competitors only by product quality. High quality is a must and the quality standards must be met to stay as a supplier. Many of the interviewed customers also talked about the significance of delivering consistent quality level over time. The customers generally look for technical performance, product reliability and product consistency.
2. *Service support* is the second dimension that appeared from the interviews. Service is an important way for the supplier to diverse from competitors, and means that the customer wants product-related service, additional services and the right information at the right time. The customer information is about supplier availability, receiving appropriate information and the speed of information. Another component is the possibility of outsourcing activities, like product testing and design work, to the suppliers.
3. *Delivery performance* is the third dimension of relationship value. Customer value is created when the supplier consistently is meeting the delivery schedules and adjusts to changes. Accuracy which means that the supplier always delivers the right parts is another way for a supplier to create value for the customer.
4. *Supplier know-how* is about having knowledge of the supply market, improvement of existing products and development of new products. Suppliers sometimes have a specific technical expertise which the manufacturers do not have and can therefore use the supplier's know-how. The suppliers constantly look for existing supply sources for their customers and present them with alternative new solutions based on their knowledge of the supply market and its development. This makes it possible for the suppliers to add value to the customer by improving products and development of new products.
5. *Time to market* means that the customer wants to reduce overall cycle times and suppliers can add value through better design, faster prototype development than the competitors and quicker product testing and validation.

6. *Business relationships* are managed by people and are an important aspect to create customer value. Personal interaction is a value dimension where communication, problem solving and mutual goals are advantages that create value. Personal interaction should be developed at all levels within an organisation.
7. Another category is *direct product cost (price)*. Manufacturers have a big focus on direct product costs and expect their supplier to make annual price decreases and cost reduction programs.
8. The last division of customer value is the *process costs* and main areas for reducing the process costs are inventory costs, order-handling costs and costs for incoming inspections.

In this theoretical part customer value has been described and framework that focuses on customer value in a business-to-business context has been presented. This framework contains the eight categories product quality, service support, delivery performance, supplier know-how, time to market, personal interaction, direct product cost and process cost that will be used as a starting point to structure coming empirics and analysis. In the next part Resource Based View will be presented to understand how competitive advantage is achieved within the firm.

3.3 Resourced Based View

In order to determine in what way a specific company manage the changing situation on a market regarding customer focus, it is important to identify and describe the company's internal activities and how they aim towards a desired end. With resourced based view the activities in a certain area of a company can be analyzed and how and if they contribute to a desired end.

The resourced based view of the firm is a theoretical framework for understanding how competitive advantage is achieved within the firm and how this advantage can be sustained over time. This perspective is a complement to traditional strategy that focuses on industry structure, and strategic positioning within that structure, as the determinant of competitive advantage.⁶⁸ The resourced based view is used in order to identify an organisation's internal capabilities and resources, thus a complement to the more external focus that traditional strategy offers.⁶⁹

The resourced based view is relatively new, thus definitions and approaches towards the theory varies. Therefore the reader will be guided through the different expressions, *desired end*, *capabilities*, *element*, *resources*, *stock*, and *flow* and how they are related.

3.3.1 Capabilities and desired ends

In brief, "*a capability is the ability-to-do*⁷⁰, and what is done is formulated in terms of affecting a desired-end".⁷¹ The capability's structure consists of elements that contain stock of accumulated flow.^{72,73}

The desired end of a capability explains the capability's purpose. More specifically, the desired end is what a firm seeks to achieve by deploying the capability.⁷⁴ The organisation's capabilities are based on developing, carrying, and exchanging information through the firm's human capital in order to affect a desired end.⁷⁵

The definition of a capability is chosen from Amit & Schoemaker because it answers well to the thesis field of interest.

*"Capabilities refer to a firm's capacity to deploy resources, usually in combination, using organizational processes, to affect a desired end."*⁷⁶

⁶⁸ Eisenhardt , Martin, (2000), p. 1105

⁶⁹ Ibid

⁷⁰ Gibe, J., (2007), p. 11

⁷¹ Amit, R., Schoemaker, P., (1993), p. 35

⁷² Gibe, J., (2007), p. 11

⁷³ Dierickx., I, Cool, K., (1989), p. 1507

⁷⁴ Gibe, J., (2007), p. 11

⁷⁵ Amit, R., Schoemaker. P., (1993), p. 35

⁷⁶ Ibid

In addition to this definition a capability must have reached a threshold level of a routine activity that is reliable in order to be defined as a capability.⁷⁷ Behaviours that is non-repetitive as ad-hoc problem solving is not a routine and thus not a capability.⁷⁸

3.3.2 Elements⁷⁹

A capability can analytically be broken down and specified into sub-units. These sub-units are referred to as elements. This means that they are individually part of a specific capability under study, and collectively they constitute it. The elements differ depending on the capability and they enable the capability to reach a desired end. Elements in this thesis are defined as:

“Elements are factors that collectively cause variation in the level to which a capability’s desired end is achieved”⁸⁰

When the potential elements have been identified they should be evaluated, and some perhaps eliminated, before the final elements can be established. In the evaluation phase and the identification of elements following features should be exhibited:

- Does element $E_1, E_2, E_3, \dots, E_n$ have a significant contribution to variations in the desired end (DE)?
- Exclusivity in relation to each other ($E_1 \neq E_2 \neq, \dots, \neq E_n$)
- Separation from the desired end ($E_{1, \dots, n} \neq DE$)
- Subjected to managerial influence.

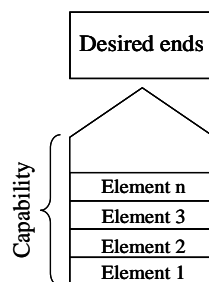


Figure 1. Element’s relation to the capability and desired end⁸¹

⁷⁷ Helfat, E. C., (2003), pp. 997-1010

⁷⁸ Winter, G. S., (2003), pp. 991-995

⁷⁹ Gibe, J., (2007), pp. 11-27

⁸⁰ Ibid p. 26

⁸¹ Ibid, p. 284

3.3.3 Stocks and Flows

Stock is the tangible or intangible asset that an organisation possess' and the flow is referred to as the action or actions that has the ability to effect the stock level.⁸² Stock can be seen as a company's present level of an asset that can be built over time.^{83, 84} Thus, an asset or resource is to be referred to as stock in terms of to what extent this resource is developed.

The stock level, meaning to what extent a resource is developed, can be altered over some period of time by flow. Flow could be a consistent set of "word-of-mouth" advertising, production and quality control policies etc, depending on what affects the level of stock.⁸⁵ Due to the flow, the element, and therefore the capability, changes, because it is being built over some period of time due to accumulated flow.

In order to illustrate the relation between stock and flows, an example of a bathtub is used. The stock is the water level in the bathtub. This could be seen as something that accumulates over time and that is built and modified by the company through flow. Thus, flow that is the water from the tap can be modified immediately whereas the level of the stock is delayed, much depending on the present water level in the bath tub. There is also argued that customers forget over time and therefore a constant flow is always needed in order to maintain the company's present stock level.⁸⁶

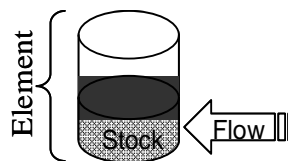


Figure 2. Relation between stock and flow⁸⁷

⁸² Dierickx., I & Cool, K., (1989), p 1507

⁸³ Ibid

⁸⁴ Dierickx., I & Cool, K., (1994), p. 4

⁸⁵ Ibid

⁸⁶ Dierickx., I & Cool, K., (1989), p 1507

⁸⁷ Andersson, P et al., (2006)

3.3.4 The microstructure framework

The linkage between flow, stock, elements, capability and desired end is described in figure 3. The element constitutes of stocks of activities which can be affected by a flow (arrow 1 and 2). The relationship between the elements and the desired end is described through the term capability (arrow 3). The flow can be affected by internal factors (arrow 4 and 5) and external factors (arrow 6).⁸⁸ The internal as well as the external factors vary depending on the capability and the desired end under study. This thesis does not intend to study how the flow is affected, therefore, a more thorough description of the factors are not of relevance.

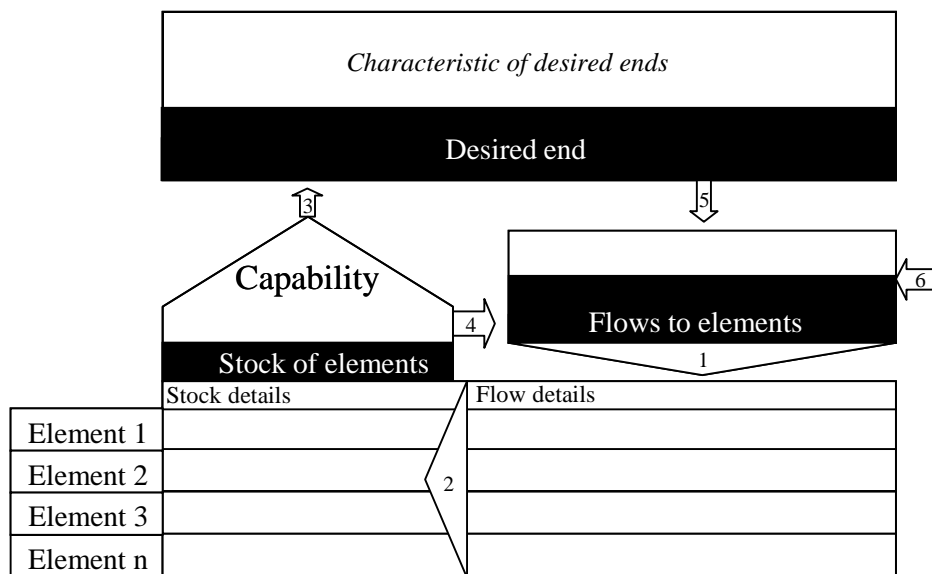


Figure 3. Contextualized breakdown of relationships between flows, elements, capabilities, and desired end⁸⁹

To summarize this theory the resourced based view is about understanding how competitive advantage is accomplished within the firm and how it can be sustained over time. This theory will be used to identify a company's internal capabilities and activities as a complement to a more external focus.

⁸⁸ Gibe, J., (2007), p.18, p.256

⁸⁹ Ibid

3.4 The relation between theory and empiric

In order describe the relation between theory and empiric, the mining market will be analyzed concerning how it handles value innovation, but also which the primary changes are towards a more customer focused approach. This will be answered by comparing the empiric with the four action framework that was presented in blue ocean strategy.

A study of which activities the case company possesses that enables to understand what creates value for the customer will be conducted and determined. The activities will be identified based on Ulagas eight categories framework that focuses on customer value in a business-to-business context.

The breakdown of the case company's activities will begin with the establishment of the desired end and the capability. Thereafter the elements will be established through a screening process of Ulaga's categories.

Through the theoretical model, shown in figure 4, Ulaga's categories will be screened against the empiric from customers and Metso Mining. This will result in elements which will constitute Metso Mining's capability. The capability will be identified both in South America and in Scandinavia. Thereafter identification of similar activities will be conducted in order to draw general conclusions.

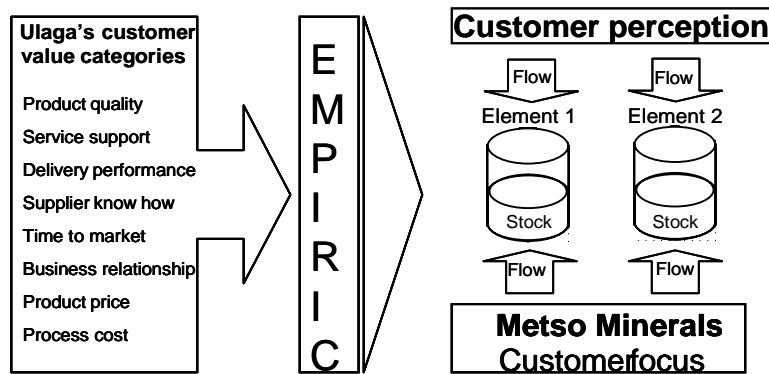


Figure 4. Construction of elements⁹⁰

The elements will be established through the procedure described in figure 4. Each category will be analysed from the costumers and the case company's perspective in order to establish the customer focused activities in each category. At the same time as the customer focused activities are being established the flow to each activity will be analysed and established simultaneously. If the company's activities contribute with updates on customer satisfaction the category will be considered as an element in the capability.

⁹⁰ Authors of the thesis

The number of activities performed in the category will be considered as the element's stock. When all elements and their stock and flow have been identified the microstructure (fig 5) of the capability can be established.

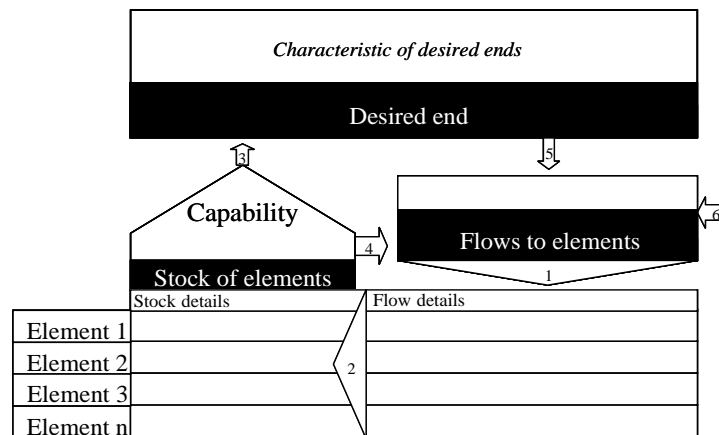


Figure 5. Creation of the capability⁹¹

The last step, and the final analysis is the identification of elements and activities (elements stock) that exist in both Metso Mining South America and Scandinavia. These are identified according to figure 6. This step will highlight the activities that are much alike and could be considered general customer focused activities.

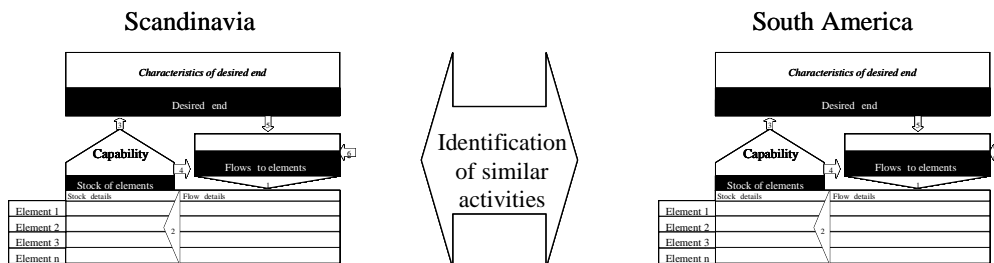


Figure 6. Identification of similar activities⁹²

⁹¹ Gibe, J., (2007), p.18, p.256

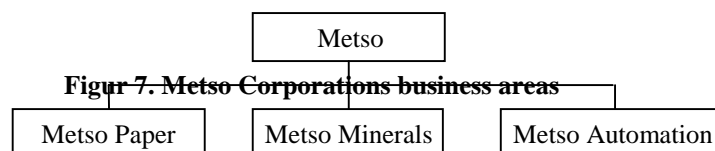
⁹² Ibid

4 Empiric

In the following chapter all relevant gathered information will be presented. The chapter will include the different markets and the chosen sites of this thesis. In order to offer the reader a better understanding, the two different markets begin with a brief introduction of Metso Minerals organisation. The reason that Metso Minerals numbers are presented instead of Metso Mining is that due to the recent reorganisation, it is difficult to interpret numbers on lower levels in the organisation. Thereafter the general condition on a specific market is presented followed by the activities that focus towards their customers.

4.1 Metso Corporation⁹³

Metso is a global engineering and technology company serving customers in the pulp and paper, rock and minerals processing, power generation and energy industry. In 2006 Metso had approximately 26 000 employees in more than 50 countries. Their net sales mounted to 5 billion EURO. Even though Asia and South America are becoming increasingly important Europe and North America are their main markets. Metso has three business areas, namely Metso Paper, Metso Minerals and Metso Automation.



4.2 Introduction of Metso Minerals

As shown in figure 7 Metso Minerals is a business area of Metso Corporation and they employ 9 000 persons. The company is a global supplier of equipment, service and process solutions and their core industries are quarrying, mining and recycling with their headquarter in Helsinki, Finland. Their product range include rock and minerals processing plants, crushers and related equipment, mobile crushing and screening units, grinding mills, enrichment plants, recycling systems for minerals and metals, wear protection products and conveyor belts, as well as wear and spare parts and after-market services.⁹⁴

Metso Minerals is mainly based upon the purchase of the Swedish company Svedala Industri AB and the Finish company Nordberg.⁹⁵

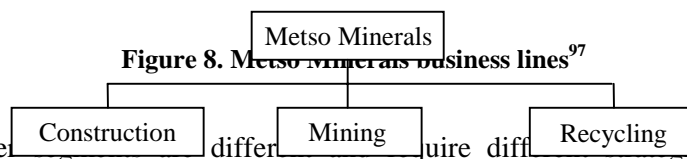
⁹³ Metso annual report, (2006)

⁹⁴ Ibid

⁹⁵ Mikkela, S., (2007-01-12)

Metso Minerals' share of Metso Corporation's net sale in 2006 was 43 percent resulting in a net sale of 2174⁹⁶ million EURO. Also, Metso Minerals has manufacturing plants, sales and service offices and distributors in over 100 countries. Furthermore, Metso Minerals is divided into three business lines which are Metso Mining, Metso Construction and Metso Recycling, as shown in figure 8.

Figure 8. Metso Minerals business lines⁹⁷



The customer segments differ and require different services. The three business lines are therefore responsible for their customer segment strategy which includes service and research and development, which are of great importance. The business lines are responsible for the global product lines as well as the regional sales and services. A more detailed explanation of which industries each business line serves is described below.

Construction

This business line serves quarries and project-based crushing and screening operations. It provides services to aggregates and construction industries, contractors processing rock or soil for the construction and civil engineering industries, and engineering and consulting companies.

Mining

Services are provided in this business line towards mining and industrial companies extracting, processing and transporting ores and minerals. Customers such as mining contractors, engineering and consulting companies are also served within this business line.

Recycling

The Recycling business line mainly cover the service for the metal recycling industry including ferrous scrap operations, automotive industry, aluminium industry and foundries.

⁹⁶ Metso annual report, (2006)

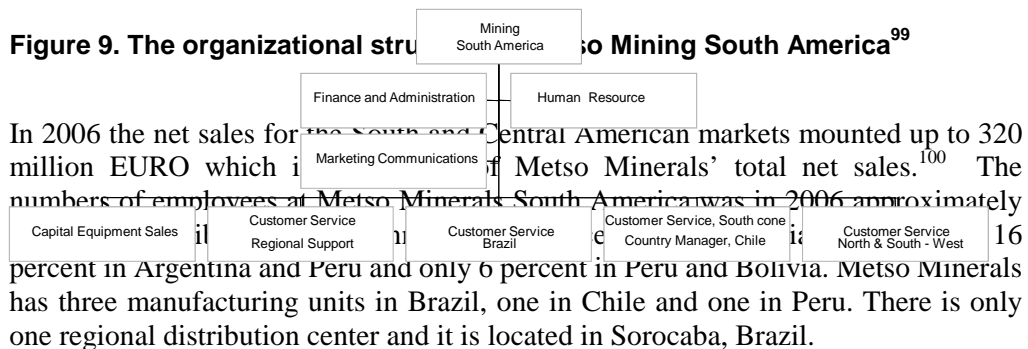
⁹⁷ www.metsominerals.com

4.3 South America

The empiric contains general information about the specific site and the region around it. It is thereafter described how the market is evolving both internally as well as externally. This is presented through the specific conditions on the market and how these may be affected. The empiric will continue with how the case company acts towards customers. The chapter ends with a survey regarding customer satisfaction which is built upon a questionnaire that the company has conducted itself in the region in order to evaluate important areas concerning customer value.

4.3.1 Metso Minerals South America

Metso Minerals South America is active within the mining and aggregates and contractors segment. The mining segment is organised according to figure 9.⁹⁸



4.3.2 The blue or red ocean market

In hard figures the demand for Metso Mining products increases with around 5 - 9 percent on a yearly basis.¹⁰¹ The region in South America is no exception and Metso Mining's heavy presence creates a lot of business opportunities. The Gross Domestic Product (GDP) growth in Brazil of 5,1 percent,¹⁰² is one of the highest in the region and almost the entire market has an increasing growth. Together with Russia, India

⁹⁸ Colagrossi, J., (2007-01-12)
⁹⁹ Internal presentation, (2007-04-17)
¹⁰⁰ Metso annual report, (2006)
¹⁰¹ Colagrossi, J., (2007-02-12)
¹⁰² www.indexmundi.com, (2007-03-12)

and China, Brazil constitutes a group of countries (BRIC) that expects to grow significantly more in the mining market than most of the world the next years.¹⁰³

From the interview with the foundry manager, plant manager and the vice president of mining screens, it was said that though the market is in a heavy growth, the actual conditions on the market are similar as they were ten years ago, but then there were fewer products to sell. Today there are a wider range of products and the required skills to handle this has increased. There are also more sophisticated machines to handle and manufacture these products. As a result the need of educating the employees has increased. The regional director states that the improvement of the product itself has been incremental and there are no indications of radical changes in the future. This has had an impact on the number of competitors on the market which are almost the same. The competition from Chinese or Indian companies may increase but the forecast from Metso Mining does not foresee any other significant changes concerning this market situation.¹⁰⁴

4.3.2.1 Conditions difficult to influence

South America has an infrastructure compared to the western world twenty years ago. In order to grow as much as the potential of the region the governments and the existing companies must take actions. The lack of infrastructure creates a significant demand of skilled partners and labour, which can compensate this with industrial process knowledge and modern working methods, in order to distribute products and services. Education is something that has been improved but unfortunately there are still too few people in South America that graduates from a higher degree level. This is no news why substantial governmental and private funds are given to education and big infrastructure constructions and projects every year. According to the manager for capital equipment this is partly fortunate for Metso Mining because they provide a lot of the necessary equipment for these projects. The present situation in South America makes it more difficult for new entrants to take market shares.¹⁰⁵

The different behaviour of people in Brazil is a fact based on that the country includes a lot of different cultures. This means that in a particular negotiation situation the agreements should be treated in one way and in another situation a complete different way. This is sometimes very difficult but it also helps the company to stay open minded and always try to see a customer on an individual basis. A customer or an employee in the jungle will not likely have the same demands and preferences as those that lives in an urban city.¹⁰⁶

There have been a lot of heavy expansions but at the same time there are a lot of postponing due to the fact that the government wants to control the market price and supply. As an example of a countermeasure against the expansion the government in

¹⁰³ Internal presentation, (2007-04-17)

¹⁰⁴ Costa, R., Grando, J., Pessoa, E., (2007-02-13)

¹⁰⁵ Boscarato, M., Covolo Jr, D., (2007-02-16)

¹⁰⁶ Salla, A., (2007-02-15)

Brazil limits the international players by demanding that 60 percent of the sales must be produced within the country.¹⁰⁷

4.3.2.2 Conditions possible to influence

Sometimes the quality of the suppliers manufacturing processes is insufficient. The quality assurance manager states that according to top international standards, suppliers today should have ISO 9001¹⁰⁸ certificates in order to meet the demands of international trading. As a result, the lack of certified suppliers sometimes makes the negotiation situation for Metso Mining complicated towards the customers. If they demanded an ISO 9001 certificate they would have a big problem finding suppliers. In order to certify their quality they have to check (certify and follow up) the suppliers in a more strict way. There is both an increasing demand for their products as well as a general demand for the raw components. Sometimes the company has to overlook recommended certificates on its suppliers. The knowledge within Metso Mining concerning how to manufacture these products are substantial but due to outsourcing efficiencies there is not a solution to integrate all of the production within the organisation.¹⁰⁹

The South American market demands a very flexible organisation as a result of the different cultures and ethnics. The regional director of mineral processing says that in order to attract a customer, the need of an open mind and a keen ear is necessary. The seller has to be very convincing while dealing with a customer otherwise they go somewhere else even though Metso Mining may have the best product or service at the best price. In the South American region there are approximately ten big customers and two or three mining equipment producers so it is important to nourish the customer relation in order to win the most profitable projects.¹¹⁰

As was mentioned earlier, almost the entire market in South America is 20 years “behind” the rest of the world. This means that it can be difficult to get the customer to truly understand why a specific service or equipment brings extra value. On the other hand it can be easier to persuade customers that a certain product or process is the best choice because they have little to compare with. The outcome is often very dependant on the specific relation between Metso Mining’s representative and the customer. Metso Mining has an intention to become more integrated in the customer’s life cycle in order to be a part of the future revenues that the customer will gain.¹¹¹

4.3.2.3 The present influence on the market

Metso Mining is an important player in the mining business in South America. Taking mergers and acquisitions into account they have been present since the early 20th century and they have built a strong reputation in the region.¹¹² As a result of strategic mergers and acquisitions Metso Mining can contribute throughout the

¹⁰⁷ Salla, A., (2007-02-15)

¹⁰⁸ www.sis.se., (2007-03-23)

¹⁰⁹ A Cunha, L., (2007-02-15)

¹¹⁰ Salla, A., (2007-02-15)

¹¹¹ Ibid

¹¹² Ibid

customers' entire lifecycles and participate in every part of the process. During the interview with the regional director it was expressed that this is something none of the competitors can provide. If a new player decides to enter the mining market the knowledge within Metso Mining is essential in order to evaluate the solution how this establishment best will be executed. Therefore Metso Mining possesses a strategic position as an important technical and logistical consultant in this business.¹¹³

Chinese players compete with low prices and this is something Metso Mining has difficulties to prevent. As a counter action they aim to be the premium supplier of mining services. Metso Mining's future probably lies in the "lifecycle" strategy meaning that the main product they provide is the service and the know-how in the different processes. The most important thing will not be selling equipment but instead "charging by the hour".¹¹⁴

The production has turned to a more assembly oriented production importing different parts from all over the world. The quality is assured within Metso Mining's own assembly line and through a close interaction with certified suppliers.¹¹⁵

4.3.3 Customer focus in South America¹¹⁶

According to the managers of marketing and communication as well as capital equipment the biggest change within Metso Mining, the past years, is the reorganisation towards a more customer oriented organisation. This means an adjustment of the organisation in order to enable higher presence at the location of the customer. Before, the organisation could be described as a technical assistant and it was more difficult to see and understand the customer's problems.¹¹⁷ Customer focus is something that has become more important in their daily business and the strategy in all their operations today takes a stand on the basis of customer needs and requirements. This means that they have to understand the reality of the customer and its business, and what they can bring to enable the customers to achieve their success. It demands the ability to participate in the entire process and what kind of activities that brings value to the customer.

4.3.3.1 Product quality

According to the quality assurance manager the entire organisation constantly strives to improve their quality and increase the productivity.¹¹⁸ The quality development department has an interface with all areas in the company, especially with the aftermarket. In case that a claim occurs from the customer it is past to Metso Mining's service area. They send it to the quality development department where the problem is investigated and appropriate actions are taken.¹¹⁹

¹¹³ Salla, A., (2007-02-15)

¹¹⁴ Luiz Junior, W., Petravivicius, C., Gouveia., (2007-02-14)

¹¹⁵ Ibid

¹¹⁶ Boscarato, M., Covolo Jr, D., (2007-02-16)

¹¹⁷ Luiz Junior, W., Petravivicius, C., Gouveia., (2007-02-14)

¹¹⁸ Colagrossi, J., (2007-02-12)

¹¹⁹ Roberto de Abreu Cunha, L., (2007-02-15)

4.3.3.2 Service support

The chief executive officer (CEO) of Metso Minerals South America states that another aspect in the reorganisation was the change from equipment and sales to aftermarket and service, which today has a higher potential of profit. It was important to reorganise the company into segments, serving different kinds of customers. This included building a stronger commitment of the service package concept. Instead of just selling equipment they are now selling a package with service included. Customer service and aftermarket have also opened offices near the sites enable them to satisfy the customer by being more available.¹²⁰

4.3.3.3 Delivery Performance¹²¹

The distribution center in Sorocaba has 24 hours support and focus on distribution and availability. They supply the customer with shipping, contract with transport companies and are present at all the Business lines of Metso Mining.

The mining market is in a high pace and keeping a sufficient stock is a challenge for Metso Mining. In order to handle necessary logistics, Sorocaba is responsible for the entire region of South America. This improves the ability to communicate and serve the customers with the right amount of goods in the right time. Through the presence of representatives at the location of customers' sites the distribution centre are able to get first hand information when a specific service or product will be demanded.¹²²

The distribution center in Sorocaba has a target of 85 percents availability. In 2007 the average availability was below the target but increased in the beginning of 2007. The target of delivery reliability is 90 percent and this is an area were the company excels within.

4.3.3.4 Supplier know-how

The units within Metso Mining share each others knowledge by allocating the experts within a specific field among the entire region, to gain superior experience in every project.¹²³ An important factor in the intensive collaboration is a database consisting of CV, hot projects, existing projects, contracts etc. This makes it possible to gain information about where in the region the best competence and knowledge for a specific project is located.¹²⁴

A market and communication division was created five years ago. The market and communication division is responsible for presentations, market intelligence, advertising and external training which facilitates for other divisions to focus on their core activities. The division gathers information, concerning new mines and trends, and concludes it before distributing it to different offices all over South America. Sales and market and communication have an intense relation. The division needs

¹²⁰ Colagrossi, J., (2007-02-12)

¹²¹ Internal presentation, (2007-01)

¹²² Luiz Junior, W., Petravivicius, C., Gouveia, R., (2007-02-14)

¹²³ Ibid

¹²⁴ Ibid

sales concerning front line information and sales need market intelligence concerning new mines, trends, etc.¹²⁵

The cooperation between different sites is often intensive and they act like internal consultants to each other.¹²⁶ All factories within Metso Mining have the same needs and they strive to share information and technologies even on a global scale by having global manufacturing meetings. There is no or very little rivalry between different sites and they ask for help or advice if a plant demands it. When a new plant is opened they bring in expertise from a lot of countries in the world in order to secure quality and exchange knowledge.¹²⁷

Five years ago Metso Minerals had a rather old oriented human resource organ which lied under the finance department. Therefore the responsibility besides human resource was for example payroll, cleaning and reception. This was not optimal in order to conduct effective work and it lead to a significant reorganization, which gave them an independent role directly under top management. The reorganization was conducted by studying big successful companies that were used as benchmarks. Today the human resource department work more on a strategic level, with benefits for the employees like training, individual coaching, teambuilding and quality of life program which will be explained below. The division follows the motto “More action less planning”. They also have an internal interface only for human resources personnel. This was expressed as very useful concerning control and internal communication.¹²⁸

The division supports all business lines by developing educational plans in order to achieve three different professional levels which are upper level management, middle level management and operational level management. They arrange leadership development programs to identify and develop professionals with specific talents. It is important to identify future leaders or specialists and design an appealing career path for each one of them. The quality of life program includes for example sports activities, activities with family members, medical evaluation and campaigns like anti-smoking and vaccination.¹²⁹

A central component to find and attract people with high knowledge is the trainee program where a lot of the employees have started their careers. The trainee program is the core supplier of competent future managers. Therefore the program is of great importance for the business. Joao Ney Colagrossi, CEO of Metso Minerals South America, is a product of the trainee program where he started 25 years ago and learned the organization and its methods. Metso Mining also cooperate with the university by for example offering the company’s manual as student literature¹³⁰

¹²⁵ Boscarato, M., (2007-02-16)

¹²⁶ Costa, R., Grando, J., Pessoa, E., (2007-02-13)

¹²⁷ Roberto de Abreu Cunha, L., (2007-02-15)

¹²⁸ Biscordi, M., Paolani, I., (2007-02-12)

¹²⁹ Ibid

¹³⁰ Colagrossi, J., (2007-02-12)

4.3.3.5 Time to market

According to the gained information during interviews in this area, insufficient data was received and is therefore not treated further.

4.3.3.6 Business relation

Metso Mining integrates life cycle thinking into everything they do according to an internal presentation. The fundamentals for life cycle strategy are to understand value but also helping the customer to create and capturing value.

Life cycle strategy includes the following aspects: process know-how, equipment, parts, after sales services and solutions. For Metso Mining the life cycle strategy gives improved customer relationships and better understanding of the customers needs. It also improves performance, capacity and availability. For the customers the life cycle strategy makes it possible for them to focus on their core business and they do not need all know-how within their company.¹³¹ The focus for the mining equipment producers is on improving equipment or plant reliability and availability through site specific maintenance programs, process optimization, inventory management and reducing safety and operational.¹³²

Relevant customer information is dependant on the continual interaction with customers through face to face visits in order to truly understand the customers' situations. They must also have a good interaction with aftermarket and service to understand what activities that brings value as well as money to their customers.¹³³

A way to communicate with the customer is training sessions with the purpose of letting the customer know what Metso Mining can bring to their business. The customers have to book and pay for these trainings but it is very popular and they are always fully booked according to the quality assurance manager.¹³⁴

Joao Ney Collagrossi, President at Metso Minerals in South America, is an important key person in the South America region and has a positive influence on the organization. He is an active president who is engaged in every part of the organisation and has through his experience, a unique over view of the company.¹³⁵ This gives him an ability to influence the integration and communication within the organisation.¹³⁶ Joao Ney Collagrossi has been influential in the reorganisation and acts as a key person when it comes to organize the different plants in South America.¹³⁷

¹³¹ Internal presentation, (2007-01-23)

¹³² Ibid

¹³³ Biscordi, M., Paolani, I., (2007-02-12)

¹³⁴ Roberto de Abreu Cunha., L., (2007-02-15)

¹³⁵ Boscarato, M., Covolo Jr, D., (2007-02-16)

¹³⁶ Biscordi, M., Paolani, I., (2007-02-12)

¹³⁷ Costa, R., Grando, J., Pessoa, E., (2007-02-13)

Within the organization “management by walking” is used.¹³⁸ This is exemplified during visits in the factories where it has shown that the managers spend a lot of time in the production which gives them a good contact with the workers. In both factories and the foundry, the managers interact with several employees in manufacturing. According to the interviewed blue collar worker and the managers of the production the workers in the factories think it is easy to communicate with the management and the supervisor, and that communication within the organisation is transparent.^{139,140} In the foundry factory the blue-collar workers meet their foreman every morning to discuss safety issues. The managers also encourage the employees to participate with concerns or ideas.¹⁴¹

Metso Mining has a program that is called “from good to great” to encourage the employees to constantly improve.¹⁴² Management gives managers on all levels confidence to take actions without fear of losing their job if it is a bad decision. A failure with a new action plan is better than no action at all. At the same time a number of failures are a warning that a manager probably has lack of expertise or knowledge concerning a specific field. If this is the case, necessary actions are taken.¹⁴³

4.3.3.7 Product price

The product support and service manager express that Metso Mining should be a high end solution to the customer, with premium prices but also the best possible solution with the highest return on investment.¹⁴⁴ This is a well aware and confident strategy where the higher initial price is motivated by a more extensive service and support enabling the customers to improve production. According to the regional director, Metso Mining’s history as a competent supplier of mining equipment, have earned a reputation enabling them to take this market position.¹⁴⁵

4.3.3.8 Process cost

According to the gained information during interviews in this area, insufficient data was received and is therefore not treated further.

4.3.4 Customer Satisfaction South America¹⁴⁶

The human resource department in Metso Minerals South America has made a questionnaire with their customers to examine the customer satisfaction (appendix 3). The questionnaire is based on a number of statements that the customers have graded and an average is then calculated. The statements are divided into three categories

¹³⁸ Colagrossi, J., (2007-02-12)

¹³⁹ Rodrigues da Silva, J., (2007-02-15)

¹⁴⁰ Costa, R., Grando, J., Pessoa, E., (2007-02-13)

¹⁴¹ Ibid

¹⁴² Luiz Junior, W., Petravivicius, C., Gouveia, R., (2007-02-14)

¹⁴³ Colagrossi, J., (2007-02-12)

¹⁴⁴ Luiz Junior, W., Petravivicius, C., Gouveia., (2007-02-14)

¹⁴⁵ Salla, A., (2007-02-15)

¹⁴⁶ Internal presentation, (2006)

which are: customer success, technology and innovation and personal commitment. In every category an average is calculated. The statements that are graded the average in their category are areas of higher performance.

4.3.4.1 Product quality, service support, delivery performance and price

Areas of higher performance in customer success are the quality of the products and services at Metso Minerals South America. The service is also better and more qualified than the competitors. The customers experience that they get the right information about the products, help with the start up and expert after-sales activities. Technical and commercial suggestions are experienced as professional and given with the right information.

Factors that do not meet the grade of higher performance, according to Metso Minerals customers in South America, are the delivery situation, the level of spare parts that are available and the prices of the products and services.

4.3.4.2 Supplier know-how and business relation

In the area of personal commitment the customers experience that Metso Minerals staff has technical knowledge that contributes with confidence in the products and services. The staff also gives answers and solutions to the customer's problems and the contact is always conducted in a transparent way.

Factors that are below the average in the area of personal commitment are the effort from the staff to supply the customer's requirements, expectations and respond to problems. Other aspects that do not live up to the higher performance within personal commitment are the degree of decision making and the statement that technical competence and the behavior of the team are differential in relations to the competitors.

Aspects in the area of technology and innovation that live up to high performance are that the customers think Metso Minerals products and services fore fill the needs of their companies and that they continuously improve.

An area that is below the average for technology and innovation is seeking for solutions for performance improvements of the products already existing in the company. Also, when there are aftermarket problems the speed and competence of technical support is below average.

4.4 Scandinavia

The empiric contains general information about the specific site and the region around it. It is thereafter described how the market is evolving both internally as well as externally. This is presented through the specific conditions on the market and how these may be affected. The empiric will continue with how the case company acts towards customers. The used headlines are based on of Ulaga's eight categories. The chapter ends with a survey regarding customer satisfaction which is built upon telephone interviews where the questions (Appendix 2) were formulated to match the South American questionnaire, as well as what could considered to be interesting concerning customer value.

4.4.1 Metso Minerals Scandinavia

The organization in Scandinavia is active within the mining, aggregates and contractors as well as recycling. The mining organization in Scandinavia is presented in figure 10.

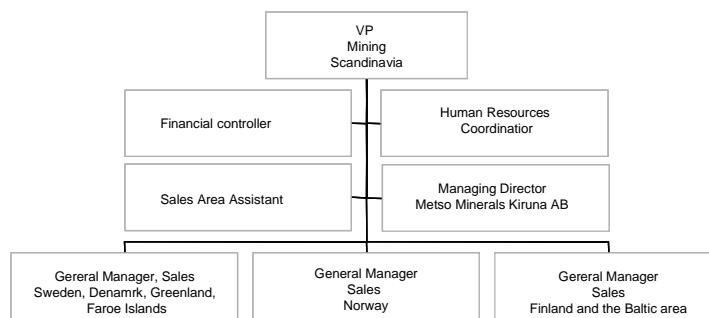


Figure 10 Organisation chart Scandinavia¹⁴⁷

The net sales for the Scandinavia region were in 2006 estimated to 175 million EURO which is 8 percent of the total sales for Metso Minerals. The number of employees in the region is approximately 1800. The sites are mainly focused in Sweden and Finland.¹⁴⁸

4.4.2 The blue or red ocean market

The general economic situation in Scandinavia is good and the entire Scandinavian industry has been facing an upmarket the latest years with a yearly GDP growth of approximately 3 percent.¹⁴⁹ Since 2003 the mining market in Scandinavia has increased rapidly as a result of the Chinese and South East Asia's significant growth within the steel industry. The big Scandinavian mining players in the northern part of Sweden and Finland have improved their production dramatically but also face a higher demand for excellence in the production. The CEO for Metso Mining Kiruna AB also states that Metso Mining has a long reputation in Scandinavia of being the

¹⁴⁷ Internal presentation, (2007-04-27)

¹⁴⁸ Metso annual report, (2006)

¹⁴⁹ www.scb.se, (2007-03-22)

most recognized supplier in the region which lately has resulted in a lot of new business opportunities.¹⁵⁰ He also states that Metso Mining has a significant market share according to the customers and that they during a long time has been doing well comparing to the competitors.¹⁵¹

The conditions on the market are a lot harder today than it was ten years ago. The demand for an increased mining production has lead to a higher pace both in the manufacturing of capital equipment as well as the support of these in order to minimize the machines down time. This has led to the entrance of new foreign competitors on the Swedish market. In order to cover all these necessary issues, Metso Mining has improved their product range which partly has demanded more sophisticated methods.¹⁵² This increases the need of skilled labour in the mining area but due to the lack of interested youths vacancies are difficult to appoint.

4.4.2.1 Conditions difficult to influence

It has become more difficult attracting new skilled labour in this region which instead has lead to some involuntarily exchanges between competitors concerning the staff. It has been very hard to attract young people to this business even if their education is well suited for these tasks. This is a big problem and therefore the market has a limited potential of growth without a serious improvement in some parts of the labour situation.¹⁵³

At the same time the market in the Swedish region has seen some new competitors mainly from South East Asian companies, selling at substantially lower prices, but without corresponding difference in product quality. One thing that Metso Mining in reality is significant better at is providing the local presence and entire service package.¹⁵⁴

4.4.2.2 Conditions possible to influence

Regarding the suppliers to Metso these are gathered from all over the world. There are a lot of suppliers evolving from South East Asia as a result of the cheap labor and the intensive growth within the mining market. A big problem is that the products must be of superior quality so that the customers' machines can be kept in work without any unnecessary delays. At the same time the market and the demand are in rapid growth meaning Metso Mining has problems keeping enough in stock. The logistics and stock keeping are therefore a big issue for all parties on this market.¹⁵⁵

In this business the main task for a mining equipment producer is to keep a good relation to the customers. One of the most important reasons for that is the number of customers. In Sweden there are in reality two big players, LKAB and Boliden. If the relationship becomes bad this will have a great impact on Metso Mining's business in

¹⁵⁰ Ivansson L., Johansson, P-A., Norberg, A., (2007-03-21)

¹⁵¹ Haapalainen, A., (2007-03-20)

¹⁵² Ibid

¹⁵³ Ivansson L., Johansson, P-A., Norberg A., (2007-03-21)

¹⁵⁴ Ibid

¹⁵⁵ Ibid

Sweden. Today the relations with customers are built upon personal relationship in a high degree.

A lot of Metso Mining's employees have worked for LKAB and Boliden and has therefore during the years earned a trust that goes beyond Metso Mining as a brand. Both in Kiruna and Gällivare there are some key employees that hold the entire relation. As a result it is difficult to institutionalise on a national level how this relationship is going to be handled. Every customer has a unique demand and the orders are often given to the mining equipment producer that creates a positive and trustful relationship.¹⁵⁶

4.4.2.3 The present influence on the market

The mining industry in Scandinavia has evolved during the entire 20th century. Because of the mergers and acquisitions that Metso Mining has conducted, the company has been represented in the region almost as long. The knowledge and trust Metso Mining has built are unique considering the range of the products and services they provide.¹⁵⁷ They have significant market share at the bigger customers, Boliden and LKAB, depending on different product lines and services.

As a result of the local presence close to the customers Metso Mining has gained a lot of knowledge from customer companies about the development of the mining industry. LKAB is world leading in security regarding mining that is forecasted to become a world standard. While Metso Mining participates along side LKAB in this development this can be used in a negotiation situation in other geographical regions. The knowledge based advantage Metso Mining possesses has proven to be a competitive advantage. It is not a static advantage and Metso must act against international competitors if this advantage is to be sustained. If Metso loses too much of the capital equipment to competitors with lower prices there is a big risk that eventually even the services will disappear.¹⁵⁸

According to the service manager in Metso Minerals Kiruna AB approximately one sixth of Metso Mining's total sales 2006 were from services and the rest came from capital equipment and parts. The customers' total costs are therefore based on the direct product cost, either in the initial sales phase or later within a service package. Therefore the CEO of Metso Mining Kiruna AB states that it would be naive to expect that the customer did not care of what level of fixed prices the supplier offers.¹⁵⁹ Metso Mining's product is often a high end solution with a premium price and this is something that is motivated by the total cost for the customer over a certain period. Metso Mining's higher initial price will have a small effect on the customers' profitability. Quality and service knowledge will enable the customer higher revenues due to less service stops. In order to balance this price towards the market, Metso

¹⁵⁶ Ivansson L, Johansson, P-A., Norberg A., (2007-03-21)

¹⁵⁷ Ibid

¹⁵⁸ Ibid

¹⁵⁹ Ibid

Mining's sales offices in the region are rather autonomous and have the ability to negotiate with the customer concerning the level of prices.¹⁶⁰

In order to sustain their current influence Metso Mining need to take care of the potential problematic delivery situation. If this fails it could mean unnecessary openings for competitors.¹⁶¹

4.4.3 Customer focus in Scandinavia

The actual work of being more customer focused, as a result of the reorganisation, have not been recognized yet according to the service manager. A lot of the activities are handled as they always have. Within the booming mining industry the demand for reliable manufacturing products has increased rapidly, enabling continual production in the mining mills. What the customer request is a solution that prevents them from loosing money over a period of time.¹⁶²

4.4.3.1 Product quality

The evolution has gone towards intensive and more sophisticated products regarding quality with a higher degree of resistance to be worn out. This is something most of the competitors can provide, mostly because they often are interrelated with each others organisations and suppliers as a result of earlier mergers and acquisitions. If a competitor can not reach a certain quality standard the mining market will reject this player. Product development is a big and central question on the Swedish market and this is one of the main reasons why Metso Mining is trying to be as close to the customers sites as possible. Exchanging information out at the mills enables the company to develop and test products in order to get instant feedback. For the mining company it has a huge impact on the result if you have to change a certain machine in the mill ones or twice a year. This is based on that a service stop could mean hundreds of thousand of dollars.¹⁶³

4.4.3.2 Service Support

Besides capital equipment sales, an important part is the supporting activities Metso Mining provide their customers with in order to avoid unplanned stops. This is an assignment often regarded as very popular among the customers which has lead to that Metso Mining sometimes conduct these inspections even on the competitors machines at the customers site.¹⁶⁴

According to the CEO in Kiruna, the service manager in Kiruna and the Swedish general manager Metso Mining have a history and a reputation within the mining industry, to possess an excellent knowledge regarding the product and services. Often the employees has a background from the biggest mining companies, enabling them

¹⁶⁰ Haapalainen, A., (2007-03-20)

¹⁶¹ Ivansson L, Johansson, P., Norberg A., (2007-03-21)

¹⁶² Ibid

¹⁶³ Ibid

¹⁶⁴ Haapalainen, A., (2007-03-20)

to truly understand what issues the customer are facing and which of these matters the most to the production.¹⁶⁵

4.4.3.3 Delivery Performance

Sales and service offices have the authority to adapt the stock level they consider necessary in order to support the customer. This means that the inbound logistics are not centralized to the national head quarter.¹⁶⁶ This affect the measurement of their delivery performance because it is measured on the basis of a specific distribution hub and the total information concerning their performance has to be gathered in order to see the whole picture.¹⁶⁷

The mining market has such a high pace in its turnover that Metso Mining does not consider it is worth the risk of not having products in stock due to a slim inventory. Instead the main issue is to keep the stocks up high enough in order to meet the customers demand. This is one of the most urgent and important matters between the suppliers and the customers.¹⁶⁸

Metso Mining with its local presence still has an advantage regarding delivery performance compared to most of its competitors but this is an area where there are a lot of improvements to be done.¹⁶⁹ It is important that the sales office have enough information from their own suppliers so that they can communicate with their customers about deliveries. If this information is incorrect the customer can face a lot of issues in the production and therefore it is vital that the communication within the company is operating smoothly. Simplicity in the order handling from the customer's point of view is substantial to the relationship.¹⁷⁰

4.4.3.4 Supplier know-how

Knowledge regarding the products that Metso Mining are selling is a fundamental part and something that the sale representative constantly has to improve, partly by being out at the plants but also through internal training within the organisation.¹⁷¹ In order to manage this Metso Mining reallocates their internal resources within Scandinavia, so that they constantly can provide the right man at the right place. An example of this according to a vendor at Metso Mining is Alf Norberg, the CEO in Kiruna, who could be considered according to the human resource manager as a guru in the mining industry earning trust from all participating parties.¹⁷² For basic service support an external firm is used due to the company's limited personnel.¹⁷³

¹⁶⁵ Ivansson L., Johansson, P., Norberg, A., (2007-03-21)

¹⁶⁶ Ibid

¹⁶⁷ Mikkilä, S., (2007-04-26)

¹⁶⁸ Ivansson L., Johansson, P., Norberg, A., (2007-03-21)

¹⁶⁹ Bergman, L-E., (2007-03-21)

¹⁷⁰ Ibid

¹⁷¹ Haapalainen, A., (2007-03-20)

¹⁷² Göransson G., (2007-04-03)

¹⁷³ Haapalainen, A., (2007-03-20)

Reallocation of know-how is an effective way to develop the services that are provided by Metso Mining towards the customers. Presence at the customer enables Metso Mining to foresee new opportunities. The employees that operate in the field still have to improve their skill in identifying customer's weaknesses in order to generate new business opportunities. This could be done by improving the internal education.¹⁷⁴ Metso Mining sometimes uses external help concerning installations and other supportive activities.¹⁷⁵

The entire industry experiences difficulties recruiting competent personnel. There is also a significant part of the staff that will reach retirement age within the next five years. This has led to a situation where Metso Mining must take actions regarding their recruitment processes. The human resource department is today responsible for salaries, personnel administration and agreements, recruiting etc. To meet the future the human resource department should take a bigger part of recruitment on a strategic level. There has been some planning concerning a better interaction in the entire region with possible exchange programs as well as more and better internal trainings. In order to attract younger talented workers, Metso Mining must offer a better focus on the staff and their needs.¹⁷⁶

Due to the limited recruitment basis it is important to educate a substantial part of the staff. In reality this has meant that a lot of the managers are bound to find a suitable future replacement for employees. In this way the management can prepare them in a way that he/she will be ready for the forthcoming task.¹⁷⁷ There are still some improvements to be done in order to increase the competence among the representatives at the customer.¹⁷⁸

4.4.3.5 Time to market

According to the gained information during interviews in this area, insufficient data was received and is therefore not treated further.

4.4.3.6 Business relation¹⁷⁹

The service manager express that Metso Mining's ambition is to be a part of the customer's entire process, so that they can contribute in every aspect possible in the production. This means that Metso Mining should supply the customer with knowledge, appropriate products and services and to foresee new possible solutions. Part of the customer's process that Metso could do better should be outsourced in order to let the customer, i.e. the mining company, focus on their core activities. Every business is nursed and handled within a good personal relationship. Metso Mining (Kiruna) AB has during a long time focused on the customers as the primary

¹⁷⁴ Karlsson, J., (2007-03-21)

¹⁷⁵ Haapalainen, A., (2007-03-20)

¹⁷⁶ Göransson, G., (2007-04-03)

¹⁷⁷ Ibid

¹⁷⁸ Karlsson, J., (2007-03-21)

¹⁷⁹ Haapalainen, A., (2007-03-20)

activity in their business. If this is changed towards central decisions from headquarters a lot of the customers will probably disappear according to the service manager in Kiruna.¹⁸⁰ In order to withhold these relations key salesmen in the Metso Mining organisation have a great impact and therefore a great responsibility of handling this relationship towards the customer. The CEO in Kiruna, service manager in Kiruna as well as the general manager in Sweden states that without some key representatives at the sales offices, Metso Mining will find it more difficult to compete with competitors that have lower prices in the future.¹⁸¹ This is something that could be difficult for Metso Mining in the future when new generations take over.¹⁸²

The leadership within Metso Minerals in Scandinavia is under reconstruction. A lot of managers have been relocated and the management positions have been adjusted.¹⁸³ The situation has led to some uncertainties regarding responsibility areas.¹⁸⁴ The actual management is divided over the entire region and coordinated through regular meetings. Sweden, Norway and Finland have an executive group of managers from each country, with the task of building the business in the entire region.¹⁸⁵

The management is aware of that the future demands an autonomous structure in order to satisfy the customers. In reality this means that the sales and service offices need to be able to act without a compulsory central decision. Doing so, Metso Mining can gain new competence faster which are more suited to the purpose.¹⁸⁶

4.4.3.7 Product price

Metso Mining shall be a supplier in the premium price segment which is motivated with higher quality and an extensive service. According to the service manager the competence that they possess is a competitive advantage and most of the customers will therefore pay a premium in order to receive higher quality and better guarantee.¹⁸⁷ At the same time it is expressed from Metso Mining representatives, that this price can not differ too much compared with lower price alternative. With an increased competition and higher costs for capital equipment, it is not likely that a manager responsible for purchase at a mining company can motivate a significant higher price only with better service.¹⁸⁸

4.4.3.8 Process cost

According to the gained information during interviews in this area, insufficient data was received and is therefore not treated further.

¹⁸⁰ Haapalainen, A., (2007-03-20)

¹⁸¹ Ivansson L., Johansson, P., Norberg, A., (2007-03-21)

¹⁸² Haapalainen, A., (2007-03-20)

¹⁸³ Ivansson L., Johansson, P., Norberg, A., (2007-03-21)

¹⁸⁴ Haapalainen, A., (2007-03-20)

¹⁸⁵ Stene, J-O., (2007-04-02)

¹⁸⁶ Haapalainen, A., (2007-03-20)

¹⁸⁷ Ibid

¹⁸⁸ Ivansson L., Johansson, P., Norberg, A., (2007-03-21)

4.4.4 Customer Satisfaction Scandinavia

A number of parameters that brings value to the customers have repeatedly been mentioned during the interviews with Metso Mining's customers. In order to match the empiric between Scandinavia and South America the customer satisfaction is divided throughout the same headlines. The answers in Scandinavia are therefore organised into the South American headlines.

4.4.4.1 Product quality, service support, delivery performance and price

The customers express that unplanned stops in the production will cause significant losses and therefore the delivery time and its reliability is of great importance. It means that the customers expect to receive the right amount of a certain article at the right time. According to the customers Metso Mining still has a lot to improve in this area. The customer emphasises that the importance of this area is due to that problems or a delay in their production creates enormous costs.^{189, 190, 191}

The customer considers it to be important that their suppliers are available and close to their production because of the high production pace. This makes it possible to immediately support them with service and spare parts.^{192, 193} Accurate deliveries are one of the most important activities Metso Mining can contribute with. Other customer focus activities can not be seen as essential as the importance of delivery performance.¹⁹⁴ The customers express that regardless if a delivery has failed or not it is important that the supplier continuously communicate with them. If orders fail it often takes a long time to recover this. The customers also want to be provided with the right specifications, documentations and affirmation regarding delivery status. The delivery performance is essential to the business.¹⁹⁵

The customer considers it to be easy to contact Metso Mining and they provide support on a short notice due to their local presence. If something happens in the production Metso Mining can set up a team of experts consulting in that issue. Another effect of the local presence is that the personal relationship between supplier and customer becomes very intense, enabling them to understand each others activities.¹⁹⁶

Within the service area, Metso Mining's customers think that their presence and support are of great importance and enables them to focus on their core production. In order to fulfil this Metso Mining must be present by the customer side and be able to help them when a problem occur.¹⁹⁷

¹⁸⁹ Ojanlatva, H., (2007-03-23)

¹⁹⁰ Ek, N., (2007-03-23)

¹⁹¹ Lantsgren, J., (2007-03-23)

¹⁹² Ojanlatva, H., (2007-03-23)

¹⁹³ Carlsson, S., (2007-03-30)

¹⁹⁴ Ek, N., (2007-03-23),

¹⁹⁵ Ibid

¹⁹⁶ Lantsgren, J., (2007-03-23)

¹⁹⁷ Ojanlatva, H., (2007-03-23)

4.4.4.2 Supplier know-how and business relation

The customer experience that the relationship in many ways have been static for a long time. There are a couple of key players at Metso Mining that handles their entire relation. To a large extent these relationships have a direct impact on why they choose Metso Mining. As an example the acquisition of Svensk Gruv Teknik AB who possessed valuable relations prevented a potential loss of customers at Boliden.¹⁹⁸ Even if Metso Mining is very competent there is sometimes obvious that it is a big organisation with a lot of projects involved. The customer says that this sometimes give them the impression that that they are not prioritized.¹⁹⁹

A majority of the problems that the Swedish customers face demands advanced solutions performed by highly skilled professionals. The customers express that competence regarding this area is an essential value driver for them.²⁰⁰ If a supplier can not offer this service the result of the collaboration will be poor.²⁰¹ Their supplier must have the ability to help them to improve the business and constantly seek adjustments that will bring more value to the products and processes.²⁰²

Metso Mining has a reputation to be knowledge intensive and to offer a superior product quality and service package. Their experience is that Metso Mining's representatives concerning sales and service often are very competent and offer improvements of old solutions, but could improve the ability to foresee new solutions.²⁰³

¹⁹⁸ Carlsson, S., (2007-03-30)

¹⁹⁹ Lantsgren, J., (2007-03-23)

²⁰⁰ Carlsson, S., (2007-03-30)

²⁰¹ Ibid

²⁰² Ojanlatva, H., (2007-03-23)

²⁰³ Lantsgren, J., (2007-03-23)

5 Analysis

To determine the reason of how the market is changing, Blue Ocean Strategy describes and analyzes the changing conditions for both the customers and the mining equipment producers. This theory helps the reader to understand why a company within the mining industry should adjust to a more customer focused approach and what could be gained. When the changing conditions have been established the analysis will determine in what way a company manage the changing situation on the market regarding increasing customer focus. This is done by identifying and describing the internal activities and how they aim and contribute towards the desired end.

5.1 The market throughout Blue Ocean Strategy

There are indications, based on interviews and media, that the mining industry is under a significant change and mining equipment producers tend to turn from a product oriented approach towards a customer focused approach. This is probably a result of the developing market conditions. Examples of changing conditions in the industry are higher pace in the production, new geographical markets and more specific demands from the customers. The market will be analyzed through the blue ocean strategy in order see if there are indications of changes towards customer focus.

The main reason for the changing market is the resent increasing demand of ores and minerals. An important factor is the evolving mining market in the South East Asia. As a result of a more global market the customers are coming closer to each other, in order to prospect in profitable areas, which increase the interaction and the competition. Due to this expansion, the mining market attracts new competitors to enter, especially from the BRIC countries where a lot of potential revenues could be gained both for the mining companies as well as their equipment producers. All these aspects increase the requirements from the mining equipment producers to find new ways to provide and satisfy their different customers with necessary products and solutions.

In order to understand what the future customers prefer, the strategic view should be through a “blue ocean strategy” by observing the market in a way that enables new customer focused activities to enter. Based on interviews and observations at the sites, this kind of action improvements has not been performed in recent times but seems to evolve as a more central issue. Therefore, the red ocean in “blue ocean strategy” could be described as capital equipment sales with basic service, which has been illustrative for the business during a long time. With new competitors entering the market with significantly lower prices but almost the same quality, the blue ocean view has to be what new fields of opportunity at the customer there are to explore. This improves the revenues and profits for both parties. The development of the products is incremental so these improvements will probably be evolved around the existing products, like extensive service packages, spare parts, consultation etc.

5.1.1 Value innovation

The best way to survive in this market, which is affected by an increased competition, is to create new possible ways to gain profit. In this case it is not primary about financial set backs, logistic improvements etc. Instead it is about interacting with the customer in a way that both parties develop new activities and processes together, enabling them to gain additional revenues. A good way to achieve this is through value innovation which refers to creating new areas of value for the customers. The main reason for this is that the customers' preferences vary depending on size, geographical location and specific business area within the mining industry. It will therefore be important to constantly seek individual improvements at the customers' sites in order to be an attractive competitor even in the future.

With a successful value innovation the markets conditions change and there will be room for more players, due to the additional market assignments that has been created. In this case it has meant improved service packages, increased after market activities, consulting commissions etc. According to the interviews, this is something most customers would appreciate, for example, in order to manage the mining companies' need of a more effective and increased production.

5.1.2 A framework analyzing this customer oriented change

To create new value on a market, differentiation is necessary. Regarding the mining market there are some apparent changes, mentioned above, that could describe the development towards a more customer focused approach.

The changes, towards a more customer focused approach, indicate that it is the value drivers on the mining market that are changing. What has been obvious competitive advantage earlier, are not necessary the aspects that will contribute to future profits. For instance, sales of capital equipment is an area that has been quite dominant in the past but due to evolving cost effective competitors there is a risk that some mining equipment producers will loose market shares. Instead, these producers could develop and promote a superior know-how compared to their competitors, based on long experience and extensive knowledge. Their competitive advantage should, instead of a cost effective production, be more personnel oriented while they possess the most skilled labour within the mining industry. This gives them an opportunity to explore and develop what kind of activities that would additionally contribute to the customer in the service and aftermarket and sales area. In order to concretize why the mining market probably is going towards an increased customer focus, some obvious factors that indicates changes are presented below according to the blue ocean framework.

- **Which of the factors that the industry takes for granted should be *eliminated*?**

Due to an improved infrastructure worldwide regional boundaries will have a diminishing influence on the business. The competitive advantage that a certain company has possessed in a specific region will not necessary last without adaptation to the new conditions. A static view on the customers prevents the companies and their ability to constantly seek alternative solutions. With an evolving mining industry these kinds of players will soon be out of the market.

- **Which factors should be *reduced well below the industry standard*?**

In the past the manufacturing of components has been a central part of the mining equipment producers business. This has been the key value driver. It is still an important part, but today a lot of the production is outsourced due to efficiency reasons, therefore effective assembly lines will have a bigger influence on the business for a lot of the mining equipment producers. This means that the manufacturing of mining equipment components may be centralized to regions where the labor cost is significantly lower and therefore the companies are able to produce at a lower cost.

In order to gain and maintain customers, sales of capital equipment will be fundamental even in the future. At the same time, this is a function that does not necessarily lead to aftermarket and service commissions. According to the future strategy, which is to take a more customer focused approach, aftermarket and sales will become a more important part than capital equipment sales. An alternative could be to focus less on instant sales and focus more on continual operative competence.

- **Which factors should be *raised well above the industry's standard*?**

Based on the interviews and reports, it is a great possibility that the service and aftermarket activities are an area that will increase the influence on the potential revenues. The direct effect will be alternate revenue distribution which will both create opportunities for some players but also limit for others depending on how these conditions are managed. The area is still rather unexplored but at the same time there are indications from the customers that an increased support is of great interest. With an increased support in the production, the customers are able to focus on their core activity, mining, and therefore meet the increasing demand for ores and minerals. Also, by working intensely with the customers' aftermarket and service, an important interaction can be created regarding how the customers' preferences are developing. With this gained knowledge new opportunities are more easily detected and new solutions and services could be developed.

The demand for ores and minerals are, according to both the mining equipment producers as well as their customers, greater than ever and almost the entire mining industry is stretching beyond maximum capacity in order to meet the world demand. With a higher quality in the suppliers' products and services, less unscheduled stops will occur, and increasing production is achievable. The trade off between higher initial price from products and services will pay off with fewer deficiencies. This will be based on what level of quality they are able to provide, both in the products they sell but also within the service and consulting assignments. Therefore this is something that will have to be improved in the future. An actual example is that many mining companies seek suppliers that are ISO certified. If a company meets a certain international recognized standard, as ISO, this can serve as a guarantee that processes within the company reach a certain quality level.

Though this is an expanding market, the attractiveness of this industry among the younger generations is poor. In order to recruit and maintain competent personnel,

increasing internal educations has been conducted among existing staff but also efforts to attract people that have never been in the mining industry through trainee programs. This is mainly done through substantial trainee programs, career coaching and personnel events.

- **Which factors should be *created* that the industry has never offered?**

Mining projects often demands huge financial investments today, relative to projects in the past, and the risk connected to a project could often be considered high. It lies in the mining equipment producer's interest that these projects succeed due to the potential revenues it could bring for a long period of time. With this approach, the mining equipment producer may have to take a bigger share of the risk of a project in the future but, to gain a larger part of the customer's business and revenues. To be able to attract a customer the mining equipment producer should participate in the customer's entire lifecycle, provide and share necessary experience, knowledge and capital resources in order to create new businesses. This could create potential stream of revenues in aftermarket and service.

5.1.3 Is this supporting customer oriented change on the market?

Due to the increased production and a general evolution on the mining market that has been expressed, the factors above indicates an increasing demand for more support and sophisticated solutions in order to attract customers. To create such a support the mining equipment producer must increase its own competence. The most apparent way to do this on today's market is through an increased interaction and participation with the customer.

Based on the discussion above, the future conditions on this market will probably demand a higher degree of customer value awareness among the mining equipment producers, in order to constantly update what customer focused activities the customer actually prefers. This means that it will be of value to explore important activities that aim to identify what is changing concerning customer value.

An analysis of which activities the case company possesses that enables to understand what creates value for the customer will be conducted and determined. The identified activities will be based on Ulagas eight categories framework that focuses on customer value in a business-to-business context.

5.2 Creating the capability's microstructure

From the microstructure in the theoretical framework the relationship between elements and desired end through the term capability will be described. The empirical data is analyzed through the model in order to link particular flow to elements within the capability.

5.2.1 Establishing the desired end and the capability

The desired end of a capability explains the capability's purpose. More specifically, the desired end is what a firm seeks to achieve by deploying the capability.²⁰⁴

By describing the mining market through Blue Ocean Strategy it is apparent that the main focus will be on the increased customer focus activities that are evolving. This serves the purpose well which is to describe and analyze how the mining equipment producers on a global market manage to handle the changing conditions concerning customer value. In order to draw conclusions how companies should handle the change concerning customer focus it is important to understand what creates customer focus within companies.

The desired end and the capability are based upon the authors' interpretation of what is relevant to study in order to answer the purpose. This is developed throughout a discussion where the interview forms as well as the authors' desired direction of the thesis have been prioritized. It has also been matched with representatives from Metso that has approved the desired end and the capability as interesting aspects.

In chapter one it has been argued that positive customer focus provides value for the customer. Therefore, in order to answer how to successfully handle a change concerning positive customer focus a company always need to know what is contributing with positive customer focus. Consequently, the desired end and the capability in this analysis are:

The desired end: Understand customer value.

The capability: The ability to ensure continuous updates on what is providing customer value.

5.2.2 South America

5.2.2.1 Elements

In order to evaluate which categories that is relevant to analyse at Metso Mining a screening process has been conducted against the empirics. By quantifying if a category have been mentioned (n) by a person during the interviews a conclusion is drawn if the category is relevant as a potential element or not. The analysis does not consider a category to be more or less important as a result of its number (n). However, the number gives an indication of the empirical foundation in a specific

²⁰⁴ Gibe, J., (2007), p.11

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category. Each category will be given an illustrative comment, if possible, in order to present what have been reoccurring during interviews. The categories that qualify will be further analysed in the following subchapter in order to identify potential categories that later will act as the elements used to reach the desired end.

Category	Illustrative comments	n
Product quality	-” The entire organisation constantly has to improve their quality and increase the productivity.” (Colagrossi, 12/02/07)	10
Service support	-”Customer Service and aftermarket have opened offices near the sites to be able to satisfy the customer by being available.” (Colagrossi, 12/02/07)	7
Delivery performance	-”In the beginning of 2007 the availability increased and reached the target.” (Luiz Junior, W., Petravivicius, C., Gouveia. 2007-02-14)	5
Supplier know how	-” A central component is to find and attract people with high knowledge”. (Colagrossi, 12/02/07)	5
Time to market	-	0
Business relationship	-” Customer information is significantly dependant on the continual interaction with customers through face to face visits in order to truly understand the customers’ situations.” (Biscordi & Paolani, 12/02/07)	13
Product price	”Metso Mining’s product price is higher than the competitors.” (Salla, A, 15/02/07)	4
Process cost	-	0

Table2 Illustrative comments South America

According to the screening above two categories does not qualify for further analysis due to the lack of relevant information. The categories are process cost and time to market which have not been mentioned during interviews according to what Ulaga include in these categories. Thus, only the following categories will be further analysed as potential elements:

- Product quality
- Delivery performance
- Product price
- Service support
- Supplier know how
- Business relationship

The categories are valid as elements, in accordance to Resourced Base View theory, because they have a significant contribution to variations in the desired end subjected to managerial influence, separated from the desired end and have exclusivity in relation to each other.

5.2.2.2 Constructing the capability

From the comparison above, elements have been identified. In the following chapter an analysis of the elements stock and flow, which were introduced in the theoretical framework, will be presented, resulting in the capability's microstructure.

Product quality

In this element the company ensures continuous updates on what is providing customer value by having a quality development department. If a claim from a customer occurs, it is past to the service area. Then the service area sends it to the quality development department where the problems are investigated and appropriate actions are taken.

This organizational structure seems to be moderately centralized and the information path is obvious independent of where in the organisation the requested improvement has been identified. This enables the firm to control and update the evolving problems and how they should be prioritized. With a clear quality improvement structure it also becomes easier for the customers to understand how their problems are handled and that appropriate actions are being taken. This could improve the interaction and therefore improve the ability to understand the customers' preferences.

Service support

The second element is service support which is updated by the activity to build service packages in interaction with the customer. The unique service package give indications of what type of service that is valuable for the customer. Having offices near the customers' sites facilitates the interaction with the customer.

Service packages are something that Metso Mining in South America seems to use frequently as a strategic tool to attract and to build a lasting relationship with the customers. This strategy has been identified during interviews due to the extensive promotion of the support Metso Mining can provide their customers with.

Delivery performance

The company can continuously update what is providing customer value by measuring delivery performance. If the company has a high reliability and the customer is still unsatisfied this could indicate that the element is moving towards being of a higher value. A centralized distribution centre enables the company to have all relevant figures in one place which may facilitate measurement of delivery performance.

This is an area that still needs to be improved due to the increasing demand of mining equipment products. Through a centralized distribution centre Metso Mining has a better ability to understand what spare parts and components that needs to be taken into stock. Even if they lack a certain component the awareness of this becomes better and actions are more easily taken than if the stock is decentralized.

Supplier know-how

An activity that indicates the level of supplier know-how is the ability for the company to manage service assignments with own staff. The company creates

supplier know-how by sharing knowledge within the organization. If external help is used on regular basis this could indicate a lack in the company's know-how. Internal human resources play an important role in the recruitment and the ability to keep the most important part of the staff within the company. Customer training is another important activity within supplier know-how due to the sharing of information during these trainings.

If the future demands a higher degree of knowledge in order to win service and aftermarket orders, the company's know-how is an important indicator that reveals the company's ability to compete on the market. Regular outsourcing together with decreasing sales of capital equipment could diminish the position and the influence on the market.

Business relation

The element business relation is updated by having personal interaction with the customer. The company creates personal interaction with the customers by having offices near the sites so they can meet the customers face to face. Customer training sessions are an important activity that creates personal interaction and are conducted by the market and communication division. Also, the organisation is managed in a way enabling the personnel to gain, maintain and spread knowledge.

It is apparent through interviews that the business relation is fundamental in the mining business due to fact that there are not that many important customers that possess the big contracts for the mining equipment producers. If a relationship becomes bad or ineffective, this can have major consequences for the company's financial situation. Winning an order is often based to a high degree of the trust that is built through the relationship.

Product price

Through the activity business negotiations the company is regularly updated on how the product price is valued by the customer. The case company's product price is higher than the competitors. This is something that the company is well aware of due to regular business negotiations and a situation that they do not intend to change. The customer will pay a higher instant price but instead gain extensive service and production improvements. According to the substantial cost a stop in the production cause better quality in production and services, which enable them to reach potentially higher profits over a period of time.

The chosen price strategy seems to fit Metso Mining's forecast of the future. The confidence among personnel in this strategy is noticeable and seems to be the best way adapting to future market conditions.

5.2.2.3 The South American microstructure

From the analysis above, all elements and their stock and flow have been identified and the capability microstructure for South America has been established according to the figure below. The stock details are described as a key take away from the analytical discussion from a certain category. Flow details constitutes from an activity or a department that maintain the specific stock detail. All presented stocks are

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aiming towards the capability that in turn enables the company to reach the desired end.

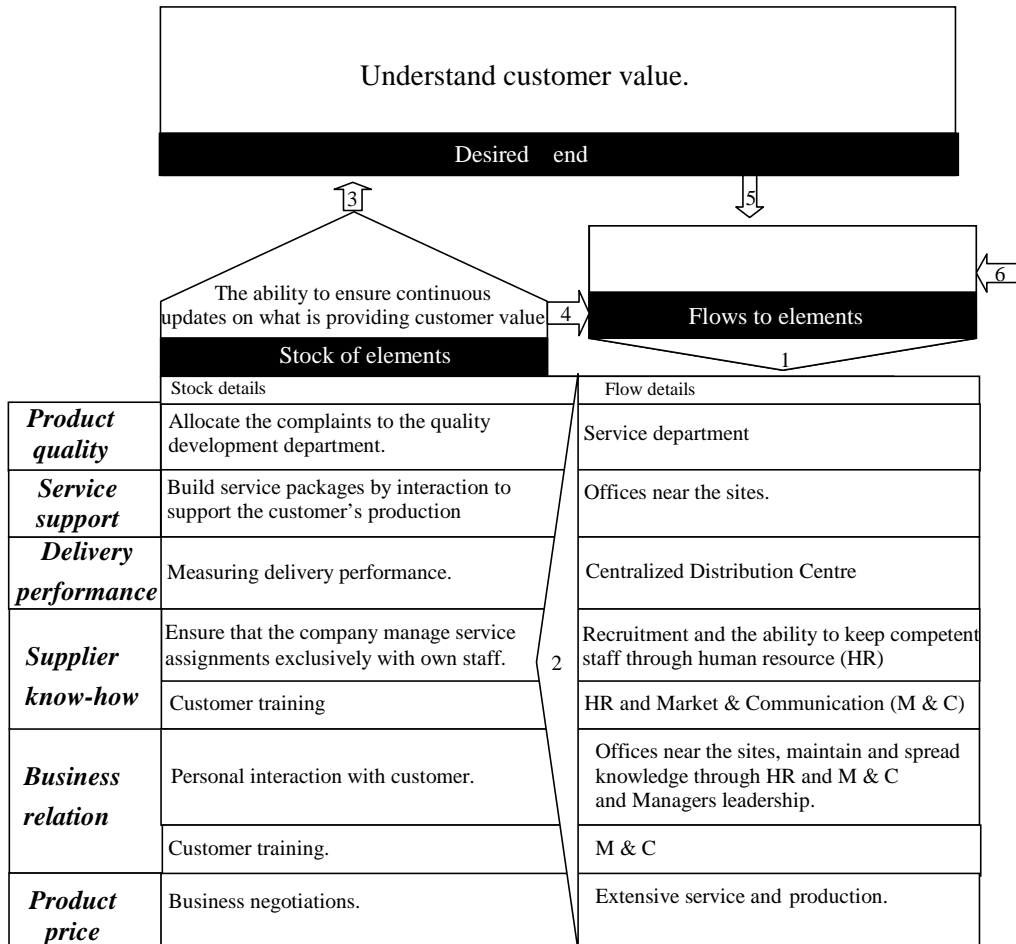


Figure 01. The South American capability's microstructure

5.2.3 Scandinavia

5.2.3.1 Elements

In order to evaluate which categories that is relevant to analyse at Metso Mining a screening process has been conducted against the empirics. By quantifying if a category have been mentioned (n) by a person during the interviews a conclusion is drawn if the category is relevant as a potential element or not. The analysis does not consider a category to be more or less important as a result of its number (n). However, the number gives an indication of the empirical foundation in a specific category. Each category will be given an illustrative comment, if possible, in order to present what have been reoccurring during interviews. The categories that qualify will be further analysed in the following subchapter in order to identify potential categories that later will act as the elements used to reach the desired end.

Category	Illustrative comments	n
Product Quality	-“If a competitor can not reach a certain quality standard the mining market will reject this player. Product development is a big and central question on the Swedish market.” (Johansson, 21/03/2007)	6
Service Support	-“Be present by the customer side and be able to help when things get messy” (Lantsgren, 30/03/07)	9
Delivery performance	-“Accurate deliveries is the single most important activity Metso can contribute with”(Ek, 30/03/07) -“If an order fail it often takes a long time to recover this. This makes the delivery performance essential to the business”(Lantsgren, 30/03/07)	4
Supplier Know how	-“The competence is essential in order to bring value to the customer”(Lantsgren, 30/03/07)	7
Time to market	-	0
Business relationship	-“Alf Norberg could considered to be a guru in the mining industry earning trust from all participating parties” (Göransson, 03/04/07) -“Without some key representatives at the Sales offices, Metso Mining will find it hard to compete with less expensive competitors in the future”(Norberg, 28/03/07)	10
Product Price	-“ It would be naive to expect that the customer did not care of what level of fixed prices the supplier offers” (Johansson, 21/03/2007)	3
Process Cost	-	0

Table 3 Illustrative comments Scandinavia

According to the screening above two categories does not qualify for further analysis due to the lack of relevant information. This has not been mentioned during interviews and therefore the following remaining categories for an analysis will be:

- Product quality
- Delivery performance
- Product price
- Service support
- Supplier know how
- Business relationship

The categories are valid as elements, in accordance to Resourced Base View theory, because they have a significant contribution to variations in the desired end subjected to managerial influence, separated from the desired end and have exclusivity in relation to each other.

5.2.3.2 Constructing the capability

From the comparison above elements have been identified. In the following chapter an analysis of the elements stock and flow, which were introduced in the theoretical framework, will be presented, resulting in the capability's microstructure.

Product quality

In this element the company ensures continuous updates on what is providing customer value regarding product quality by having a close interaction with the customers through local presence. This is best conducted through offices out at the sites. It is through these offices the company can gain continuous knowledge and exchange information on how to improve the product quality.

It is expressed both by Metso Mining as well as their customers that presence at the mills enables the company to develop and test products in order to get instant feedback, regarding the quality improvements. This relationship has been expressed as quite successful by both parties.

Service support

This element serves to understand how to continuously support the customer with necessary services. Through an intensive interaction with customer the service can be improved and adjusted individually. The way to handle this is by a close collaboration which is dependant by having offices close to the sites.

Metso Mining is very clear with the importance of a substantial service support that enables the customers to maintain the production and to focus on their core activity, mining. At the same time the service does not seem to be a strategic tool in the same way as in South America with so called "service packages" in order to attract customers.

Delivery performance

This element is about measuring the delivery reliability. This could indicate potential problems in the company's deliver performance. In Scandinavia it is rather decentralized and is therefore difficult to gather and interpret logistic measurements accurately.

Sales and service offices within Metso Mining express some concerns regarding the delivery performance and they compensate their risks with individual stock keeping based on their customers' preferences. For Metso Mining it could be of relevance to centralize logistic decisions and distribution in order to gain better control over the national stock. In this way it is easier to update the organisation on what the customer are satisfied with and what needs to be improved.

Supplier know-how

This activity measure to what degree the company manage service assignments with own staff. The company's existing human capital aims to serve their customer's entire process. If external help is required, this could indicate that the customers' demand is changing in a way the company can not provide. It is therefore important to continuously update the company's staff on what the customer require. The gained information should be spread within the entire organisation in order to institutionalize relevant knowledge. In this way additional competence regarding customer preferences can be gained which is necessary to compete as a customer focused company. The company's know-how can be improved by internal training and strategic recruitments. These are areas that are dependant on the human resource department.

A lot of the supporting assignments that Metso wins from customers are outsourced to certified external consultants who also are based out at the sites. In this way, Metso Mining can keep up with the customers demand and requirements, and therefore keep up the good reputation. The risk with this is that it could be difficult for Metso Mining to control where the main knowledge in the company is situated. In the long run this could mean loosing competence that is necessary to for the customer focused strategy.

Business relation

In order to achieve a true understanding of what brings customer value the business relationship, between Metso Mining and the customers, is fundamental. In Scandinavia these relationships are a central activity and something that are mentioned continuously. In order to build this relationship, Metso Mining have offices near the sites. Because of this Metso Mining has earned very strong bonds to a lot of their important customers but in most cases they are dependant on a couple of key employees out at the sites, which control almost the entire relation.

This area is something that is very emphasized by the employees at the sales and service offices. It could be dependant upon a subjective approach by them but at the same time, through observations as well as interviews with customers, the business relation seems to be very dependant on individual relation on a personal level. It is important to be aware of this fact on a management level, in order to handle and keep relevant personnel when new competitors enter the market, trying to attract and recruit competent staff.

Product price

Through the activity of business negotiations the company is regularly updated on how the product price is valued by the customer. The case company's product price is higher than the competitors. This is something that the company is well aware of due to regular business negotiations and a situation that they do not intend to change. The

customer will pay a higher instant price but instead gain an extensive service and production improvements enabling them to reach higher profits over a period of time. At the same time, this is an area that the case company foresees to be a potential issue if the gap between initial prices becomes too high. It is not difficult to understand, on today's competitive mining market, that when a mining company purchase new capital equipment and there are significant differences between to competitive alternatives, the arguments for the higher price becomes complicated.

5.2.3.3 The Scandinavian microstructure

From the analysis above all elements and their stock and flow have been identified and the capability microstructure for Scandinavia has been established according to the figure below. The stock details are described as a key take away from the analytical discussion from a certain category. Flow details constitutes from an activity or a department that maintain the specific stock detail. All presented stocks are aiming towards the capability that in turn enables the company to reach the desired end.

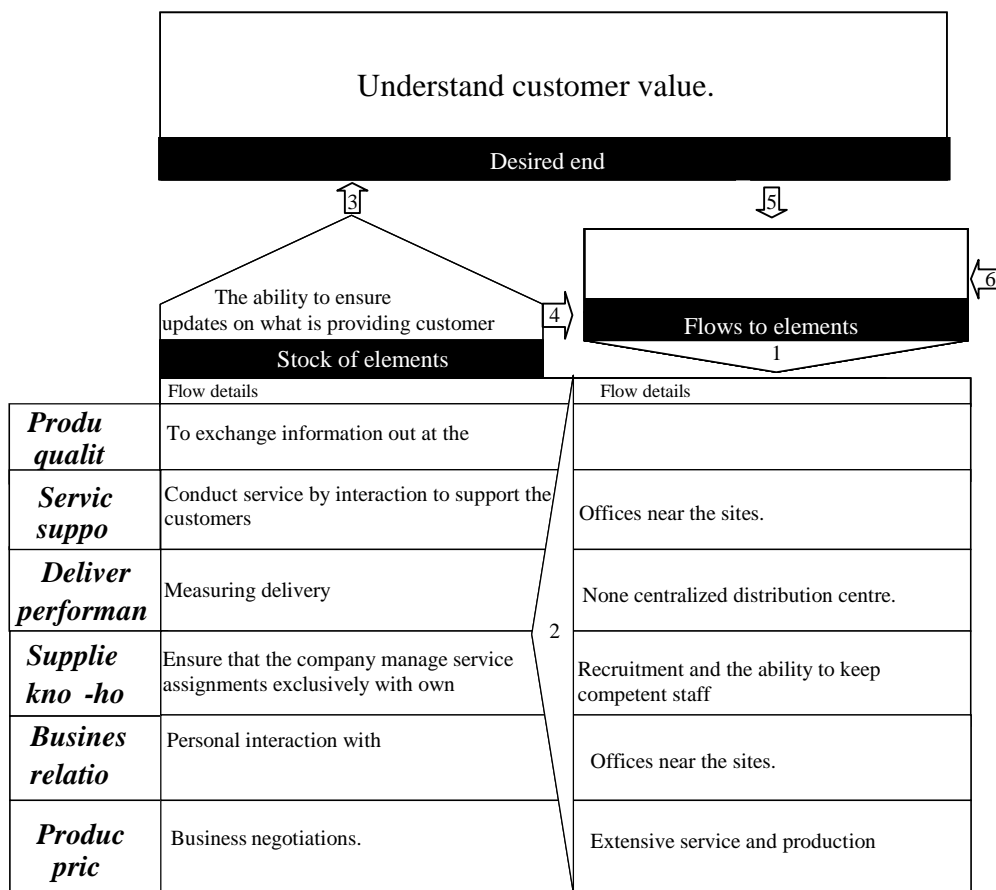


Figure 12. The Scandinavian microstructure

5.3 Identification of similar stock

In the following chapter similarities between the Scandinavian and South American elements will be identified. Even though they do not have entirely matching activities within an element similarities will be emphasized. This comparative analysis will constitute as the foundation for further identification of general activities. These activities update customer value within the industry of mining equipment producers.

5.3.1 Comparing the elements

Product quality

Based on the analysis product improvements is something that are considered to be important but treated differently between the two sites. The management in South America seems to take a more active role in order to enlighten deficiencies and what could be improved, through organized training sessions and by gathering complaints in a more centralized way. This is performed through a quality development department. Scandinavia has a high confidence in what word of mouth could reveal and it is through local presence and testing products out at the mills improvements could be gained in order to get feedback on the quality improvements.

- Ensuring product quality has a close relationship to customer interaction which is based on having offices near the sites.

Service Support

Both sites have a substantial organisation to provide the customers with necessary support. It includes service assignments as well as some consulting. This has been described as very essential to the business, on both markets, in order to withhold a good and productive relation to the customer. The main difference is that South America seems to act in a more proactive way and Scandinavia in a more reactive way. This means that South America is trying to create and sell additional service packages in a higher degree in order to gain new revenues.

- Updating service support has a high degree of interaction to customer which is based on having offices near the sites.

Delivery Performance

This is a critical element that both sites are well aware of. They have mutually significant issues meeting the customers' needs. Though, there is a difference between the site's logistic strategies. South America has a centralized distribution centre and Scandinavia has a rather divided distribution. Therefore, it seems that delivery measurement is easier to conduct and interpret in South America.

- Continual measurement indicates the customer's perception regarding delivery performance.

Supplier know-how

Metso Mining is an important actor on both markets and it is unusual that their customers exclusively turn to competitors when an order handling is made. To ensure that the customers choose Metso Mining instead of the competitors they have manage

the customers' entire process within the organisation. If this changes it could be an indication of losing relevant know-how. The best way to achieve this is by constantly attract and keep competent staff. South America uses the activity, to educate the customers and learn from this, more frequently than Scandinavia.

- Ensure that the company manage service assignments exclusively with own staff.

Business relation

Based on the empirical findings the business relation is fundamental in order to attract and keep customers. At both sites this is something Metso Mining is considering to handle in a good way. In Scandinavia there are some key individuals that possess almost the entire relation to the customer. South America seems to institutionalize this more thoroughly within the organisation by involving more departments, like human resource, market and communication as well as management, in this process.

- Through long intensive presence out at the mines the mining equipment producers possess a deep relation to their customers.

Product Price

At both sites Metso Mining's ambition is not to compete with low prices, instead there is a well aware strategy to be a high end solution. This is primary motivated by a supreme service which aims to create customer value. At the same time, the quality differences between competitors are diminishing. With an increased gap between competitors' initial prices, it could be difficult to motivate it only by better service.

- It is important to continuously update what are offered to the customer and how this price is set towards competitor's price.

5.3.2 Matching stock

From the comparison above activities in stock have been extracted from the different elements. The similarity regarding an activity that has been identified in an element will now be further analyzed. This is done in order to validate that it is of a general nature i.e. applicable in other companies in the industry.

Further, the analysis between South America and Scandinavia will be conducted by comparing similar activities within an element, to six factors. If the factors are met, it implies that a certain activity would be of a general character. The factors have been established by the authors and are based upon interviews and observations at the sites. If a specific factor has been identified in both markets it became subject to a brainstorming that aimed to validate if that activity was general. There was an elimination of factors that were too much alike or not general enough, resulting in six factors:

- Have been identified in two different markets

If an activity has been identified in two different markets the risk that this activity is a result of specific circumstances is negligible.

Examples of circumstances could be political, legal and economical aspects. The chosen case studies represent environments that vary in all these aspects and are interdependent of each other.

- Have been identified in two separate cultures

Through the authors' observations, the people in these markets could be considered to be indifferent in their behaviour. Examples of this are their code of conduct regarding how agreements are settled, personal criticism and company commitment. Furthermore, the difference in the social hierarchy within a country affects the organisational culture. An activity that is not affected by these aspects is considered to be general.

- Are based on a company's basic resources

If the activity does not demand special resources or competences the chance that others within the industry could perform the same activity is highly likely. The simplicity of an activity implies that it could be of a general nature. Some circumstances regarding the resources at the two case studies are infrastructure, educational levels and technical development.

- Are persistent over time

An activity should be reliable over a period of time in order to consider it as general for the entire industry. An activity that has had an impact in one region but diminish or differ over time could be questionable if it is general on other markets. Examples of this are a specific leadership connected to a key person in the organisation.

- Have been identified through prior general business to business research

If an activity provide information to an area that has already been established through prior research, this activity might be in the general area as well. In this case the activities, identified during interviews and observations, have been screened against Ulaga's eight general categories.

- Been expressed as highly important by mining customers

Independent on what customer focused activities a company perform the main priority is that it correlates with the customers' preferences on what is valuable. This must coincide with customers on different markets in order to avoid specific preferences due to particular conditions. If this demand is met, the limited number of important customers on both markets indicates that these preferences are general for the entire industry.

5.3.2.1 Activities considered being general for mining equipment producers

Five specific customer focus activities have been identified as being general in order to understand customer value. The activities that constitute stock in the elements, service support, delivery performance, supplier know-how, business relation and product price could all in accordance with interviews, perceptions and observations meet the requirements.

The identification of a similar activity in two different markets and cultures were observed in all the elements above. They are all based on a company's basic resources, in this case, fundamental measurements, offices (buildings) and human capital. These are dependent of a market's infrastructure, degree of education, technical competence and could therefore be regarded as based on basic resources. The activities in the elements are all persistent. Measurements, buildings and relation are something that does not diminish over time. In this case the identified activities was screened against Ulaga's eight general categories meaning that they have been identified through prior business to business research.

The five activities could, based on the factors, be regarded as general. The purpose is to identify activities that could be considered to be general for the mining industry. Therefore the chosen activities will answer well to the purpose of the study.

5.3.2.2 Activities considered not being general for mining equipment producers

With this in mind one category seems to differ from the rest and it is product quality. Though it meets most of the developed parameters above, the specific way to ensure product quality seems to differ in a way that it could not be considered as general for the mining business. Product quality differs between the two sites concerning how the gathering of information is treated. It is considered important at both sites, but in South America the impression is that the management of information is more centralized. Therefore, based on the findings in this thesis, continuous update regarding product quality could not be considered as general for the market. Product quality will not qualify for further generalization.

6 Results and discussion

Within this study the target group consists of two important parties, University of Lund and Metso Mining. In order to fulfil their interests this chapter is divided into two parts. It will commence with the academic approach where general results based on the analysis will be presented and the stated purpose of the thesis will be answered. The results will thereafter be subject to a general discussion. This will be followed by a chapter where findings that are considered to be of value for Metso Mining are presented.

6.1 An academic research

The academic research is based upon the purpose of the study and the findings must be of a character that could be useful to the general research. The purpose that will be answered is:

“How the mining equipment producers on a global market manage to handle the changing conditions concerning customer value.”

Based on the interviews, activities that manage mining equipment producers to stay updated on what is contributing with customer value have been studied on two different geographical markets. Through the identified activities and the consideration of the general factors in chapter 5.3.2 a generalization is possible. The activities that fulfil the factors of being general and therefore answers the purpose is presented in chapter 6.1.1. There have been other interesting findings but in order to answer the purpose the activities should be on a general level.

6.1.1 Customer focus activities that update customer value

Based on the analysis the following five customer focused activities could be considered as general for managing the changing conditions for the mining equipment producers towards customers.

- *Through long intensive presence out at the mines the mining equipment producers possess a deep relation to their customers. This is based on having offices near the sites.*

The business relations to the mining companies depend much upon the intensive and long relation that has evolved. The personal interaction has been stressed as essential. It is something that has to be persistent and reliable and is built over a long period of time. Personal interaction is facilitated by having offices near the customer and therefore offices near the sites are considered to be a flow affecting the intensity of the interaction.

- *Updating of service support has a high degree of interaction to customer which is based on having offices near the sites.*

Service support has been expressed to be offered from mining equipment producers to the mining companies in different ways. The difference is mainly the awareness of how the service support is offered which may depend on that different cultures have alternative codes of conduct. Regarding service support there could be a more outspoken “product”, offering formal service packages, instead of just incorporate the service in a contract.

Nevertheless the service support is imperative to the customer and therefore to the mining equipment producer as well. It has to be reliable and thus persistent. Updates on service support have been identified to be dependent on the interaction between the two parties. Offices near the sites have been identified as flow because it contributes and facilitates to such an extent to the interaction.

- *Ensure that the company manage service assignments exclusively with own staff.*

The mining equipment companies’ know-how is regarded to be of high value to the mining companies. In both markets it has been identified that service assignments are carried out at the customer with own staff. Although if a problem can not be solved internally, or that the know-how is not financial beneficial to keep in-house, external help is used. Therefore, in order to be updated on what know-how the mining companies’ value, the mining equipment producers have to ensure what service assignments they are capable of accomplish.

- *Continual measurement indicates the customer’s perception regarding delivery performance.*

Measurements regarding the delivery performance have been identified on both markets. The gathering of the information differs slightly between being more or less centralized. A well managed delivery performance is observed to be crucial for the mining companies. In order to stay updated on to what extent the mining companies’ value this activity, the need of measuring the performance is essential.

- *It is important to continuously update what are offered to the customer and how this price is set towards competitor’s price.*

Perhaps business negotiations are the most general activity. This is the most apparent forum to be updated on how mining customers perceive the mining equipment producer’s price in relation to the product or service being offered. Price is essential in general for all companies and business negotiation is an activity that is reliable and persistent over time.

6.1.2 Are these activities applicable in general on other markets?

Throughout the analysis activities are presented that contributes to an understanding about how to create customer value. In this case there are a number of activities mentioned in a way that they could be considered as general. The reason for this conclusion is that in every successful business to business relation, the correlation and understanding between what the customer wants and what the supplier can provide must coincide. What this study has explored is what kind of activities that enables a producing company to continuously understand how to please the customers and how the identified activities constitute to a company's capability. The findings are analyzed and screened so that the reader can follow how the authors' discussion and development of what could be considered as general, regarding customer focused activities in the mining market. This is a possible theoretical contribution to the general research in the academic area.

Another contribution of this thesis is the theoretical model presented in figure 4. The model combines external customer value factors and company resources. It aims towards identifying what resources a company possesses that could meet these factors in a competitive way. The model is applicable on similar comparative analyses and is believed to be useful within most business to business environments.

Through interviews and observations at the site a framework of factors has been developed in order to determine how to measure and if a specific activity could be regarded as general for the mining market. The result of this screening process, which is the six factors, could consider being a general theoretical contribution to the academic research regarding how to define a generalized activity in a certain area.

6.2 Report to Metso Minerals Scandinavia

Within Metso Minerals in Scandinavia it is outspoken that the Brazilian organisation excels in customer focus and was therefore considered to be an interesting case study. The following information is not necessarily of a general character and intended for the case company only. Because of the information's nature it will be handled in an own chapter. Although the findings presented here are not less interesting concerning an organisation's approach towards customer focus. The following discussion will take its stand based on what Scandinavia can learn from South America even though Scandinavia excels in many areas.

6.2.1 The approach of Customer Focus between the two sites

The two markets Scandinavia and South America differs. The development in infrastructure both geographically and politically differs so the conditions to conduct business may vary. At the same time there is a lot of knowledge within both organisations that are built and managed in the same way. One thing that they have in common is that they both excel on their market today. It is clear that they both consider that the customer must be the main focus in order to stay in business. This will result in that future business demands an increased interaction with the customer's entire lifecycle. Even though the two regions have been aware of the situation over a long period of time there are some activities that differ which are listed below.

6.2.1.1 Areas of interest

Human resources in Brazil have during a period of time considered internal focus to be a key issue in order to gain external focus. This means that they have made heavy investments on their staff with education, internal training, trainee programs etc. They have appointed a more strategic level to the human resource department in order to manage their existing as well as their potential staff. They also have an internal interface only for human resources personnel, that is expressed as very useful concerning control and internal communication.

Scandinavia does not appear to share the same attitude regarding the human resources department as South America. In Scandinavia they still conduct administrative duties and it was not until recently that they seriously started to get a higher organisational support for strategic recruitment. This was due to the threat of high retirement numbers within the next five years.

Another observation is that the different human resource departments do not appear to communicate as much as the same departments do in Brazil. They do communicate in Scandinavia and there are no barriers to contact one another, but the communication is observed to be more fragmental. The degree of centralization between the two countries is believed to be the reason for the difference in communication. By a higher awareness of the experiences of other human resources colleagues, it is believed that a lot could be gained concerning development and evaluation. This is thought to be strongly linked to the management's support. In Brazil the support and importance of the human resource department is observed to be more outspoken. In Brazil there is more of a team feeling as a result of the human resources ability to

integrate different departments through social activities. During visits in Sweden there have been statements of interest to see and learn more about other functions within Metso Mining.

The importance of delivery performance is increasing due to the fact that the supplies of ores and minerals are limited on the world market which is a result of the heavy expansions in regions as Brazil, Russia, India and China. This demands excellent logistics in order not to cause unplanned stops for the customer. South America seems to manage the logistics on a more centralized level and it is through the regional distribution centre sufficient amount of stock are calculated. This enables the company to enhance better control over their activities and the ability to deliver a specific order to a customer.

The perception of the Scandinavian logistic was higher lack of control. The sales offices in Sweden keep stock above normal in order to be able to assure their customer of strategic products. This is believed to cause sub optimisation regarding the organisation's handling of stock, though more research is needed to assure this fact. A sub optimisation may also cause false signals to the production plants and lack of general stock control. Further more a centralized distribution could not be identified in Scandinavia which is observed to have an impact on the awareness of the delivery performance. This is based on the fact that the same information about delivery performance that was gathered in South America not could be obtained in Scandinavia.

The leadership is and area that have been observed to differ slightly between Scandinavia and South America. In Brazil it is often said that the CEO, Joao Ney Collagrossi, is a key person who has a positive influence on the organisation. He is regarded as an active president, using and promoting "management by walking" which strives to facilitate integration and communication. By visits made to the factories and the foundry the centralization of the Brazilian organisation has become apparent. This facilitates the interaction with employees and this decreases the time to make decisions due to the closeness of managers.

In Scandinavia the impression is that the management is more scattered. A factor that is believed to contribute to this impression is the recent reorganisation that has had larger effect in Scandinavia when a lot of managers have been relocated. In order to handle this situation the entire region is coordinated through regular meetings.

6.2.1.2 Conclusions

Conclusions of what Scandinavia could benefit from the South America organisation concerning Human Resources are attitude, integration, more resources, and communication. Today the Human Resource department has limited resources. The department should be given a greater strategic focus and conduct less administrative duties. The focus of the department's importance depends on the management's attitude. It is a vital resource to manage the human capital which becomes more valuable for Metso Minerals than maybe ever before. What has been perceived in Scandinavia is an existence of a more individualistic approach towards employees. There are indications that the Scandinavian staff is interested in higher interaction

between colleagues and internal experiences, which could be beneficial on a personal development level. This may also increase the staff's know-how in a longer perspective. In Brazil it was said that customer focus excellence will only come if the internal focus reaches excellence.

The most obvious difference that could summarize delivery performance is a strategic management of logistic that manages and controls the regional level of stocks, or at least information concerning the stock. There are indications of that the communication and information between the sales and service offices, production and logistic departments could be better. A result of improvements in this area might be better control, information and that logistical bottle necks are brought up to the surface.

An aspect concerning the management in Scandinavia is the impression of less face-to-face time out at the different sites. This may have a negative effect concerning communication and integration. The more scattered organization in Scandinavia requires regular meetings in order to coordinate the region. This may have implications on how fast decisions are made and communication between managers in general. Showing which person that is in charge is believed to be of importance in order to demonstrate engagement. There are indications of greater simplicity concerning taking decisions with a more centralized organisation.

6.2.2 Future conditions for Metso Minerals Scandinavia

The mining market is an industry that could be considered as rather static and it has been that way for a long time. The companies that have been competing have faced each other for a long time and sometimes smaller actors have been acquired by bigger and more profitable actors.

There are some factors that indicate that the conditions on the mining market may change. Due to the heavy expansion in South East Asia and Russia there will arise some new players which could threat companies like Metso Minerals even on their own markets. At the same time the customers' demands more sophisticated service and product solutions and this is something that is both time- and cost consuming.

With the blue ocean strategy this study discuss that this market may be in a stage where it could be healthy to look beyond the existing rules and conditions. The profits have during a long time been gained through heavy capital equipment sales. Many competitors already realize that it may not be the future. Higher profits also demands higher risks and if the mining equipment producers should take part of these they may have to participate and interact more with their clients.

The organisation would eventually have to structure itself in a way that they have competence to provide service and product solutions that the customer does not know they need today. It is about enabling the customers to improve themselves. The success of this relation is all based on customer interaction and support. The mining equipment producer that can adjust best to these conditions will probably win because of the investments in the mining industry are so high that there are limited to no room for errors in an extensive project.

6.3 Future research proposals

The results and conclusions presented in this thesis are based upon empiric from a single case company study. Therefore further research in rivalry companies to Metso Minerals would be of interest with the contribution to further validate the findings in this thesis.

By exploring the flow more in detail to the presented activities a contribution of information of more underlying and sophisticated factors that play a role in affecting the activities could be gained. Not only further analyzing and a more detailed description of activities but also psychological aspects concerning leadership and relations would be of interest.

Customer value is the foundation of customer focused activities and research within this area could add insight in opening up customer value areas not included in Ulaga's framework used in this thesis. Even though Ulaga's categories were validated through customer interviews more extensive ones could be of value. By performing in-depth interviews with customers their perception and what they value could be clearer.

Presented in the thesis are activities that could be considered general. Customer focused activities in Scandinavia and South America that differed between the sites could also be of great interest and importance. Further investigation of all identified activities would be beneficial for the mining industry. The mining company would perceive that they were being given more value and the mining equipment producers would gain higher loyalty and more business. The identified activities are general indeed but not necessary the most important. By analysing all the acknowledged activities and what they accomplish more in detail a lot could be gained and the business could develop.

7 References

Oral Sources Metso Minerals South America

Biscordi, M., Human Resources & Quality system, Metso Minerals, *Interview* (2007-02-12)

Boscarato, M, Regional Manager Marketing & Communications South America, Metso Minerals, *Interview*, (2007-02-16)

Colagrossi, J, CEO South America, Metso Minerals, *Interview* (2007-02-12)

Costa, R, VP Mining Screens PL, Metso Minerals, *Interview* (2007-02-13)

Covolo Jr, D, Sales Manager Aggregates and Constructions, Metso Minerals, *Interview*, (2007-02-16)

Cunha, L, A, Quality Assurance Manager South America, Metso Minerals, *Interview*, (2007-02-15)

Gouveia, R, Product Support Manager WPC, Metso Minerals, *Interview*, (2007-02-14)

Grando, J, Plant Manager, Metso Minerals, *Interview* (2007-02-13)

Luiz Junior, W, Product Support Manager, Metso Minerals, *Interview*, (2007-02-14)

Paolani, I., Human Resources & Quality system, Metso Minerals, *Interview* (2007-02-12)

Petravivicius, C, Service Manager, Metso Minerals, *Interview*, (2007-02-14)

Pessoa, E, Foundry Manager, Metso Minerals, *Interview* (2007-02-13)

Roberto de Abreu Cunha, L, Quality Assurance Manager, Metso Minerals, *Interview*, (2007-02-15)

Rodrigues da Silva, J, Blue-collar worker, Metos Minerals, *Interview*, (2007-02-15)

Salla, A, Regional Director Mineral Processing South America, Metso Minerals, *Interview*, (2007-02-15)

Oral Sources Metso Minerals Scandinavia

Bergman L-E, Department Manager, Metso Minerals (Kiruna) AB, *Interview*, (2007-03-21)

Göransson G, VP Human Resource, Metso Minerals, *Interview*, (2007-04-03)

Haapalainen, A, Service Manager Metso Minerals (Kiruna) AB Kiruna, *Interview*, (2007-03-20)

Ivansson L, General Manager Sweden, Metso Minerals, (2007-03-21)

Karlsson J, Vendor, Metso Minerals (Kiruna) AB Gällivare, *Interview*, (2007-03-21)

Mikkilä, S., VP Strategic Marketing, Mining, *Interview*, 2007-01-12

Norberg A, CEO Metso Minerals (Kiruna) AB, *Interview*, (2007-03-21)

Pär-Anders Johansson Service Manager Metso Minerals (Kiruna) AB, *Interview*, (2007-03-21)

Stene J-O, VP Metso Mining Scandinavia, *Interview*, (2007-04-02)

Thulin, A., Sr. Vice President, Mining, Metso Minerals

Vidfjäll L, Planner, Boliden, *Interview*, (2007-03-30)

Oral Sources Customers Scandinavia

Carlsson S, Inbound Logistics, Boliden, *Interview*, (2007-03-30)

Ek N, Inbound Logistics, LKAB, *Interview*, (2007-03-23)

Lantsgren J, Maintenance Engineer, LKAB, *Interview*, (2007-03-23)

Ojanlatva H, Maintenance Engineer, LKAB, *Interview*, (2007-03-23)

Oral Sources other

Axelsson Y, Jernkontoret, *Interview*, (2007-04-18)

Ekström, T., Geolog, Raw Materials Group, *Interview*, (2007-05-21)

Literature

- Backman J., *Rapporter och uppsatser*, Studentlitteratur, Lund, (1998)
- Chan Kim, W., Mauborgne, R. (2005), *Blue ocean strategy*, Harvard business school press
- Denscombe M, (2000), *Forskningshandboken*, Studentlitteratur
- Jacobsen, D.I., (2002), *Vad, hur och varför?*, Studentlitteratur, Lund
- Lekvall, P., Wahlbin C. (1993), *Information för marknadsföringsbeslut*, 3:e upplagan, IHM Förlag AB, Göteborg
- Svenning, C., *Metodboken*, Lorentz Förlag, (2003)
- Wiederheim-Paul F., Ericsson L-T., *Att utreda, forska och rapportera*, Liber Ekonomi, (1991)

Articles

- Amit, R., Schoemaker, P. (1993), *Strategic assets and organizational rent*, Strategic Management Journal 14
- Blomgren, M., *Metallpriserna glöder på nytt*, 2007-03-02, www.di.se
- Benítez, J., Martín, J., Román, C. (2007), *Using fuzzy number for measuring quality of service in the hotel industry*, Tourism Management 27
- Bolton, R. (1998) *A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction*, Marketing Science 17
- Butz, H., Goodstein, L (1996), *Measuring Customer Value: Gaining the Strategic Advantage*, Organizational Dynamics
- Dierickx., I, Cool, K. (1989), *Asset Stock Accumulation and Sustainability of Competitive Advantage*, Management Science 35
- Dierickx., I., Cool, K. (1994) *Competative Strategy, Asset Accumulation and Firm Performance*, INSEAD, Pergamon Press
- Eisenhardt, K., Martin, J. (2000), *Dynamic capabilities what are they?*, Strategic Management Journal 21
- Helfat, E. C., (2003) *The dynamic resource-based view: Capabilities lifecycles*. Strategic Management Journal 24

Ljungberg, S. (2007), *Möjligheter för Sverige*, Bergsmannen, N01

Porter M. (1980), *Competitive Strategy: techniques for analyzing companies and competitors*, Free Press, New York

Seo, D., Desouza, K. (2006) *Powershifting*, Business strategy review, London Business School

Ulaga, W. (2003), *Capturing value creation in business relationships: A customer perspective*, Industrial Marketing Management 32

Winter, G. S. (2003), *Understanding dynamic capabilities*, Strategic Management Journal 24

Electronic Sources

www.indexmundi.com, (2007-03-12)

www.metso.com, (2007-03-31)

www.metsominerals.com, (2007-03-31)

www.scb.se, (2007-03-22)

www.sis.se, (2007-03-23)

Internal Presentations

Colagrossi, J, CEO South America, Internal Presentation, (07-01-12)

DC Sorocaba, Metso Minerals, Internal presentation, (2007)

External Customer Satisfaction, Internal presentation, Metso Minerals Brazil, (2006)

Kähkönen, M., President Metso Minerals, Structure update, Internal presentation, (06-09-28)

Kähkönen, M., President Metso Minerals, internal memo, (2006-09-28)

Metso Minerals Organisation, Internal presentation, (2007-04-24)

Mining Life Cycle Solution, Internal presentation, Metso Minerals, (2007-01-23)

Mining South American market area, Internal presentation, (2007-04-17)

Other Published literature

Andersson, P., Holmquist, C., Nilsson, A., Söderberg, M., & Wallström, A., (2006), Branding- en molekylär angelägenhet tidigt i försörjningskedjan. *PM at the Technology Management Programme*, Lund School of Economics and Management.

Gibe, J, The microstructure of collaborative E-business capability. Lund Institute of Economic Research, School of Economics and Management, (2007)

Metso annual report, (2006)

<http://www.jernkontoret.se/informationsbanken/presentationer/index.php>, (2007-03-05), *Diagram ur Jernkontorets årsberättelse*, (2005)

www.rmg.se/rmg2005/pages/attachements/NGM_september_2006,_Trender_inom_den_internationella_gruvindustrin.pdf, (2007-05-18), *Trender inom den internationella gruvindustrin*, (2006)

www.rmg.se/rmg2005/pages/attachements/NGM_april_2007,_Global_gruvindustrins_framtidsutsikter_fortsatt_goda.pdf, (2007-05-18), *Globala gruvindustrins framtidsutsikter fortsatt goda*, (2007-04)

Appendix 1

Interview guide

1. Which background and earlier experiences do you have?
2. What is your present position and responsibility area at Metso Mining?
3. Is our organisational chart correct?
4. Do the countries in Scandinavia/South America cooperate and how does this corporation look like?
5. Do you think there are particular circumstances in Scandinavia/South America compared to other countries?
6. How do you communicate between the different countries in Scandinavia/South America?
7. How do you communicate within the organization?
 - Within your department?
 - Between different departments?
 - With management/colleagues?
 - How can the opinions of the employees get attention from the top of the organisation?
8. What activity(ies) has the most impact on your result 5 years ago, today and 5 years later?
9. How has the organization in Scandinavia/South America changed during the past ten years?
10. What did the changes look like and how were they implemented within the organization?
11. Describe your market 5 years ago, today and 5 years later.
12. Describe your products 5 years ago, today and 5 years later.
13. Describe your competition situation 5 years ago, today and 5 years later.
14. Describe your production system 5 years ago, today and 5 years later.
15. Describe your relation/connection to other units within Metso Mining 5 years ago, today and 5 years later.
16. What kind of requirements have a customer focused approach meant to the organization?

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- Have you come across any obstacles on the way to being customer focused?
 - What kind of changes has been necessary to become customer focused?
 - What do you know/think about the development towards the customer in the future?
17. Explain how your production network is designed.
- The functions of the different producing units and their flexibility.
 - How do the units communicate?
 - What is reason that the production looks like it does?
 - In what way does it give you competition advantages?
18. Explain how your market function is designed.
- The different market units' function and flexibility.
 - What is reason that the market looks like it does?
 - In what way does it give you competition advantages?
19. What is the extent of the organisational integration between market and production?
- How have the integration been developed?
 - What are the benefits with the integration?
 - What are the disadvantages with the integration?
 - How will it evolve within the next 3 years? Why?
20. How is the logistic integrated within the different units?
- What are the networks logistical benefits?
 - What are the networks disadvantages?
 - How will the network evolve within the next 3 years? Why?
21. How is the information systems integrated between the different units?
- What are the benefits with the integration?
 - What are the disadvantages with the integration?
 - How will it evolve within the next 3 years? Why?
22. How are measurements and control systems integrated between the different units?
- What are the benefits with the integration?
 - What are the disadvantages with the integration?
 - Do you use any reward system and if you are, how is it designed?
 - How will it evolve within the next 3 years? Why?
23. Are there any specific key persons that have had a positive influence on the organisation?
24. How would you describe them?
25. Are you benchmarking against any other companies?

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26. Are there any historical explanations to the success of Metso Mining in Brazil/South America?
27. What are your thoughts concerning the future of the organization?

Appendix 2

Interview guide customer value

1. Can you mention 5 aspects a supplier in the rock and minerals processing industry should offer that you consider most valuable?
2. In what way are these valuable?
3. Does Metso Mining offer these things?
4. How was this initiated and developed?

Appendix 3

Customer Satisfaction

External Customer Satisfaction		Metso Minerals Brazil
General Average		79
Customer Success		75
1	I obtain answers to my questions and requests within appropriate terms	73
2	I receive Technical and Commercial Proposals elaborated with professionalism and with appropriate information.	80
3	I receive correct information about the products and their characteristics	81
4	I trust Metso products and service quality.	85
5	The delivery terms and conditions are complied, according to agreements	71
6	The level of spare parts availability is appropriate	64
7	The start up, commissioning and/or after-sales activities are made with professionalism	79
8	The prices practiced for products or services are compatible with their aggregate benefits	66
9	Metso has higher service and professional performance standards than its competitors.	77



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Customer Satisfaction

External Customer Satisfaction		Metso Minerals Brazil
General Average		79
Technology and Innovation		78
10	Products and service alternatives offered by Metso serve the needs of my company.	82
11	Metso products and services present continuous improvement.	80
12	Metso is concerned with the search of solutions for the performance improvement of the products already existing in the company	76
13	The technical support is fast and competent whenever there are after market problems	75
14	Metso focus in the innovation and usage of technology more than its competitors	75



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Customer Satisfaction

External Customer Satisfaction		Metso Minerals Brazil
General Average		79
Personal Commitment		83
15	I know how and whom to contact at Metso	88
16	I notice the effort of your staff to serve my needs and expectations	82
17	Negotiations and other contacts are always conducted with transparency and high ethical conduct.	88
18	I notice the effort and commitment of your staff when giving answers and solutions to the problems I present.	81
19	The degree of efficiency in taking decisions is very high.	79
20	The technical knowledge of your staff generates confidence in your products and services	84
21	The technical competence and the behaviour of Metso team are a differential in relation to our competitors	79

