The Global Sourcing Process in Emerging Markets

- The Case of Volvo Global Trucks in India -

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This thesis concludes our Master’s degree studies at the Integrated Masters Program for International Business at the School of Economics and Commercial Law, Göteborg University.

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Abstract

Today, MNCs can be found in practically every one of the 150 countries that call themselves developing, transitional or emerging markets. The characteristics among these countries are widely diverse, and the use that MNCs make of the emerging markets is varied. In the search for cutting cost, MNCs make use of the terminology such as economies of scale, outsourcing and low cost labor. This creates the foundation for the theory of global sourcing in emerging markets. Screening and implementation of global suppliers in emerging markets is highly relevant to the competitiveness of a manufacturing MNC of today. In this sense, the purpose of this thesis is to identify and analyze how to improve MNCs’ supplier implementation process in emerging markets. The study describes what an MNC’s global sourcing process looks like, and how it can be further strengthened, regarding emerging markets. In order to visualize the process the thesis involves the case company Volvo Global Trucks and the emerging market of India.

In this thesis, the authors identify that there exists vast saving potentials in India that must be utilized. The outcome suggests what is blocking the increase of global sourcing in emerging markets within the internal organization, and that which should be focused on in order to bridge these blocks.

Keywords: Global sourcing process, suppliers in emerging markets, implementation of suppliers in emerging markets, moral legitimacy.
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INTRODUCTION
1. INTRODUCTION

This chapter will present the background of the problem as well as defining it. The chapter presents the purpose of the thesis, outlines it and gives the delimitation of our explanations.

1.1 Problem Background

Through globalization and increased competition, MNCs are expanding their operations across borders in a search for growth. At the same time, the emerging markets are considered to be lucrative, due to their vast markets and the potentials they embrace. MNCs have understood that the new economies are important to quickly utilize in order to grasp the opportunities.

As MNCs tend to explore new markets and new production alternatives at lower cost, they are heavily dependent on the societal context where they are breaking ground. To find the balance between master and respect the culture is truly not easy, but very important, especially since MNCs are constantly trying to establish linkages and relationships along the available regional distribution channels, e.g., in form of suppliers and distributors.

During the recent decade, the automotive industry has amplified their use of emerging markets in several ways. Especially, the emerging markets, as they are a source of global supply, having increased substantially. As all industries, the truck industry continuously strives for increased efficiency, in order to be able to lower cost, increase output and utilize existing company resources. Consequently, the continuous struggle has forced manufacturers to move across borders and to especially make use of emerging markets’ supplier offerings.

With its huge population, approximately 1 billion, India comprises a large emerging geographical area that offers all sorts of terrain. Production, trade, and investment reforms have since 1991 provided new opportunities for Indian businessmen and an estimated 100 million to 200 million middle class
consumers. As a result, MNCs within the automotive industry have recognized India’s potential as a part in their global sourcing network. The automotive industry has been present on the Indian market for a couple of decades, and started to increase their global sourcing from the Indian supplier base.

1.2 Problem Definition
By the given background, our main problem comprises on “How can MNCs, operating in the automotive industry, improve the global sourcing process, regarding suppliers in emerging markets?” The problem focuses on Volvo Global Trucks’ supplier implementation process in emerging markets, where we have used India as our case country. Moreover, our main problem will provide an in-depth answer which will be shown in the result of the three research problems. In other words, the main problem demands many complex questions and answers; therefore in order to more easily answer it we will use sub-questions at different levels. Even if our specific study involves Volvo Global Trucks as case company, and India as a case country, we have chosen a rather general main problem in order to make our study valid, as well as applicable, to other MNCs operating in emerging markets.

Main Problem
“How can MNCs, operating in the automotive industry, improve the global sourcing process, regarding suppliers in emerging markets?”

1.3 Research Problem A
In order to get a well-documented overview, we will begin by investigating what the global sourcing process looks like. Our goal is to map and describe the global sourcing process at Volvo Global Trucks. We will thereby show that Volvo Global Trucks has a formulated process, as well as strategy, but will also investigate if its model really is applied in practice. Our main problem was focused around the keyword implementation process. However, in our

1 www.theodora.com
identification step in research problem A, we have chosen to observe the whole process flow regarding emerging markets. We believe, that in order for us to answer the main problem concerning the implementation process, we will also need to have the underlying causes of action prior to the implementation phase. The implementation process is probably very much dependent upon the prior selection process and the two words are linked together.

1.4 Research Problem B
Additionally, in research problem B we study to what degree the local environment influences the global sourcing process. To effectively map the Indian societal context we have decided to use Hans Jansson’s Institutional Analysis model, and Hofstede’s Four Dimensions on Cultures. Through an analysis of the outcome of these theories we will be able to identify if critical factors in the Indian environment influence the global sourcing process.

1.5 Research Problem C
When have answered research question “B”, which concerns how the Indian environment influences the supplier implementation process, we in research question “C” analyze if the Global Sourcing Process needs to be changed, when being implemented for global suppliers in emerging markets. Volvo Global
Trucks has stated that the process from identifying a potential supplier to the final stage of becoming a producing global supplier, can take up to two years. This research problem addresses this issue and is expected to surface in distinct recommendations of how this process should be conducted and enhanced, with the background from the two previous identified research problems A and B. It is important to highlight that this question primarily focuses on the implementation process and not the selection process. We have chosen to remove the word selection because we want to emphasize that the implementation phase is our key focus. As a consequence, this research question will reflect upon the internal organization at Volvo Global Trucks, and how to further speed up the implementation process of suppliers from emerging markets. It is expected to identify if there is a need for change, and what then should be focused on.

Research Problem C
Will the global sourcing process need to be changed, when being implemented for global suppliers in emerging markets?

As a result, by answering the three-research questions by the use of primary and secondary sources, we are determined that we will be able to answer our proposed main problem. Through the case study of Volvo India Ltd, the thesis is expected to surface with recommendations that are applicable for Volvo Global Trucks and its supply operations towards emerging markets. We hope that these recommendations finally can be transferred to our general formulated main problem.
1.6 Research Model

*Figure 1.1 - Research Model*

**Main Problem**

“How can MNCs, operating in the automotive industry, improve the global sourcing process, regarding suppliers in emerging markets?”

**Research Problem A**

What does the Global Sourcing Process look like, in relation to suppliers in emerging markets?

**Research Problem B**

How does the local environment influence the Global Sourcing Process, in emerging markets?

**Research Problem C**

Will the Global Sourcing Process need to be changed, when being implemented for global suppliers in emerging markets?

*Source: Own*
1.7 Delimitations

- We will not emphasize our case study on The Volvo Group’s other activities in India, e.g. Penta and VCE. The thesis concerns Volvo Global Trucks.

- The case company that we will use to solve the main problem is Volvo Global Trucks and Volvo India Ltd. We believe that India is a particularly interesting case country among the emerging markets due to its current stage in its economic development.

- We emphasize that our study will particularly focus on the implementation process of suppliers from emerging markets. The selection process prior to the implementation of a global supplier will be evaluated.

- The thesis will not evaluate logistical aspects in-depth when sourcing from India.
1.8 Abbreviations

Our thesis consists of various abbreviations. As a response, we have chosen to describe these below in order to allow the reader to grasp the textual context.

Table 1.1 - Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>FNR</td>
<td>Final Negotiation Report</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>GSC</td>
<td>Global Sourcing Committee</td>
</tr>
<tr>
<td>GPS</td>
<td>Global Purchasing System</td>
</tr>
<tr>
<td>GSP</td>
<td>Global Sourcing Process</td>
</tr>
<tr>
<td>LCV</td>
<td>Light Commercial Vehicle</td>
</tr>
<tr>
<td>MNC</td>
<td>Multi National Corporation</td>
</tr>
<tr>
<td>NSR</td>
<td>Negotiation Status Report</td>
</tr>
<tr>
<td>MUV</td>
<td>Multi Utility Vehicle</td>
</tr>
<tr>
<td>OEM</td>
<td>Original Equipment Manufacturer</td>
</tr>
<tr>
<td>PSL</td>
<td>Potential Supplier List</td>
</tr>
<tr>
<td>RFQ</td>
<td>Request For Quotation</td>
</tr>
<tr>
<td>RTS</td>
<td>Review of Technical Specification</td>
</tr>
<tr>
<td>SEM</td>
<td>Supplier Evaluation Model</td>
</tr>
<tr>
<td>SSEM</td>
<td>Short Supplier Evaluation Model</td>
</tr>
</tbody>
</table>

*Source: Own*
METHODOLOGY
The purpose of having a methodology is to give details and validate the progress of our research. Not only does it give an idea of how our work proceeds, but also why we chose to construct the thesis as we do and in what way it was assembled. We will commence by describing our research strategy and method, followed by how we collected and analyzed the data. Finally, we will elaborate the quality of the chosen methods.

2.1 Research Strategy

According to Yin, there are mainly five different research strategies: experiment, survey, archival analysis, history, and case study. A case study permits a research study to preserve the holistic and significant characteristics of real life events. Examples of such characteristics would be individual life cycles, organizational and managerial processes, neighborhood change, international relations, and the maturation of industries. Merriam argues that the case study works as a good instrument in order to gain an in-depth understanding of the circumstances and meaning of those concerned. The interest is in the process rather than the outcomes, in context rather than specific variables, in discovery rather than confirmation. In contrast to other qualitative research methods, case studies are intensive descriptions and analyzes of a single unit or bound system.

However, the case study method has its opponents. Yin mentions the three most common prejudices against this method. The most common one is that the case study method lacks rigorous research, implying that the researcher has too biased views, which may influence its findings and outcomes. The second most common concern is that case studies do not provide enough material to make scientific generalizations. Finally, the third complaint about case studies is that they are too time-consuming to carry out.

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2 Yin, 1994, p.3  
3 Yin, 1994, p.3  
4 Merriam, 1998, p.19  
5 Yin, 1994, p.9
Nevertheless, we chose to use the case study method, since it gives us a deeper understanding, and more of a holistic view of the studied research problem. We believe that the research problem is of a rather complex and multifaceted nature, making an in-depth analysis the most appropriate method by which to approach the problem. A case study approach consequently gives the best opportunity to understand the concept of global sourcing and implementation phase of suppliers from emerging markets.

Furthermore, Yin distinguishes between exploratory, descriptive or explanatory case studies. The difference between them are driven by the first word in the research question, namely: who, what, where, how, and why. Our research proposal is intended to provide an understanding of what the Global Sourcing Process looks like, understand how the Indian local environment affects this process, and what the process should look like when being implemented for global suppliers in emerging markets.

After have studied current theories of global sourcing, we have discovered that the coverage of how to implement the concept of global sourcing is to a large extent lacking. We have been able to use theories seen as relevant in combination with empirical findings of thorough case-company study and interviews, in order to create recommendations applicable for companies in similar situations. We believe that our purpose is exploratory since we map what the steps in the Global Sourcing Process look like, and how the local environment influences it.

2.2 Case Study Design

Yin presents four types of case study designs: single-case holistic, single-case embedded, multiple-case holistic, and multiple-case embedded design. The first characteristic in designing case studies regards single or multiple cases. Single-case is favorable when the case is critical for testing a well-founded theoretical suggestion. The theory specifies a distinct collection of propositions and circumstances within which the propositions are supposed to be true. To verify, test, or widen the theory, there may exist a single case; assemble all of the

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6 Yin, 1994, p.5
conditions for testing the theory. Another reason for a single case is when the case represents an extreme or unique case.\(^7\)

Since we are only examining one single company, Volvo Global Trucks, we have a single case design. Nevertheless, since the case comprises a common sourcing strategy for Volvo Global Trucks, which involves Renault and Mack, the study thus obtains a multiple-case dimension. However, Yin argues that a single case design approach is relevant to use when the case is unique or represents a phenomenon not previously studied or when testing a theory.\(^8\) Consequently, when initiating the empirical findings we found that the selected case was extraordinarily complex and unique. However, we felt determined that it would be possible to state some sort of generalizations and linkages to our main problem, and to the theory of global sourcing.

The following step is to choose a holistic versus an embedded approach. Embedded analysis pays its attention to sub-units, embedded units. In contrast, a holistic method is conducted when the case study solely investigates the global nature of a programme or an organization. The embedded technique has the disadvantage of being too focused towards the sub-unit level and therefore may fail to go back to larger aspects of the analysis. A holistic view on the other hand has the weakness that the case study may risk being conducted at an abstract level, missing clear measures of data. Another obstacle is that direction may shift during the progression of the study. Holistic analysis is appropriate when no logical sub-units could be identified and when relevant theory underlying the case study itself is of a holistic nature.\(^9\)

It is a tough assignment to solely choose either a holistic or embedded case study design. We will not categorize our case into one of these two approaches; instead we leave that mindset to the reader. However, we started our investigation from a holistic perspective by looking at Volvo Global Trucks’ Global Source Process, and the processes it involves. In our research questions we also investigate if this process is a result of other types of activities – not

\(^7\) Yin, 1994, p.38
\(^8\) Yin, 1994, p.40
\(^9\) Yin, 1994, p.41
originated exclusively from the process itself. This study will also involve observations from sub-units, in forms of logistics, quality, design, price, administrative matters, and so on. Therefore the study will take an embedded character, but our aim is to get a holistic answer to our main problem.

2.3 Choosing Volvo Global Truck

This study started off with a general interest in Volvo Truck due to the fact that we, during the autumn year 2000, conducted a global market study for the company. The study awoke special interest for emerging markets and the cultural context they encompass. Our proposal takes its aim at Volvo Global Trucks’ global supplier implementation process in emerging markets. The underlying reason for the study was due to the fact that it was found to be promising to implement for Volvo Global Trucks, and at the same time had an academic interest for our Professors – not to mention our personal interest.

The reason for selecting Volvo Global Trucks as case company was because it was flattering and challenging for us to be assigned this case since it turned out to be a critical case, which reflects the complexity of the supplier implementation process for MNCs on a global level. We were determined, at an early stage, that the case would not only make a contribution to Volvo Global Trucks and the academic society, but also intellectually.

2.4 Research Method

An arrangement of different methodologies is sometimes done between qualitative and quantitative research. The quantitative research is a study presented in numbers, while qualitative research means that the researcher tries to understand how parts co-operate to create a whole.\textsuperscript{10} Due to the fact that we consider our study to be a multifaceted study, a broader perspective is needed, rather than exclusively rely on either a quantitative or qualitative approach. If we had relied exclusively on one of the two methods, we would have to restrict our study to even more certain specific parameters and would most likely have missed important variables in the final outcome of the study. However, even if

\textsuperscript{10} Merriam, 1998, p.30
we utilize quantitative data in our study, our research mainly consists of qualitative data, which as a concluding remark is our chosen research method.

A case study has the advantage that it allows studying compound and social units containing a number of factors, imperative to reach an understanding of the phenomena.\textsuperscript{11} Authentic circumstances result in a significant and holistic assessment of observable facts. Moreover, the method gives understanding and information in a way that increases the reader’s knowledge concerning the subject matter. However, one can argue that the report might become too long, too detailed, or too deep, if the study strives for a rich and broad description. Other critics argue that case studies can simplify or exaggerate circumstances in a situation.\textsuperscript{12} In other words, a case study carries the risk of becoming biased, due to how the observations are perceived and evaluated by the examiner. In order to avoid this, we intend to present some issues in more detail while others are mentioned briefly, as objectively as possible. However, we are determined that the report needs to be fairly long and in-depth, bearing in mind the complexity of the problem.

\textbf{2.5 Theoretical Use}

As illustrated in figure 2.1, inductive research starts with the collection of empirical observations, which thereafter form the theoretical implications and framework of the study. On the contrary, the deductive approach is used when the researcher hopes to find information suitable for the theory.\textsuperscript{13} A third approach is a mixture of the two and is referred to as an abductive approach. Here the researcher bounces back and forth between theory and empirical evidence, and tests the empirical evidence in the theoretical context with no point of departure.

\textsuperscript{11} Merriam, 1998, p.34
\textsuperscript{12} Merriam, 1998, p.46f
\textsuperscript{13} Merriam, 1998, p.33
In this latter method interaction permits the subjective experience to be highlighted, which is an important source of knowledge. On the other hand, it also involves presenting the subjective, as well as the social part, as objectively and critically as possible.\textsuperscript{14} Interviews involve obtaining the subjective opinions of human beings and will therefore affect the results. However, our intention is to present this study as objectively and critically as possible. We agree with Wigblad that there needs to be an interaction between empirical evidence and theory in order to understand the whole of the studied phenomenon. Since our research involves both primary and secondary sources, our approach follows an abductive pattern, due to the fact that we move back and forth in between our empirical work and theory.

\section*{2.6 Data Collection}

According to Merriam, there are three different data collection techniques – conducting interviews, observing, and analyzing documents. In a qualitative case study design all three means of data collection are commonly used. Understanding the case in its totality, as well as the intensive, holistic description and analysis characteristic of a case study, requires both breadth and depth of data collection.\textsuperscript{15}

To facilitate a study of a particular case one has to identify its members and content within the sampling frame. One must explain how to identify the theoretical framework, state the problem and purpose and select a sample in the study. These parts must be done before one goes out and collects the case study data. A selection of sample is first done at the case level, followed by a sample

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{chart.png}
\caption{Three Methods of Conducting Research}
\end{figure}

\begin{itemize}
\item \textbf{Empirical}
\item \textbf{Deductive}
\item \textbf{Abductive}
\end{itemize}

\textit{Source: Own}

\textsuperscript{14} Wigblad, 1995, p.31f
\textsuperscript{15} Merriam, 1998, p 134
selection within the case. Additionally, criteria must be established to guide this process on both levels of sampling. Our first sampling was Volvo Global Trucks and their suppliers in India. The second part of sampling was our theoretical framework. The final sampling stage was to make interviews at Volvo Global Trucks and during our field study in India.

We began with a gathering of important information about Volvo Global Trucks and their activities in India, with the Global Sourcing Process in mind. The objective was to make a purposeful sampling, based on criteria, which is typical, and creates a chain or snowball thinking where one source leads to another.\textsuperscript{16} To gain pre-understanding of the situation Volvo Global Trucks is facing, we collected a substantial body of internal material, such as company reports, market studies and made use of the Intranet. To deepen the understanding we collected data from a variety of books, Internet web pages, and articles of different kinds. Meetings with our coordinator at Volvo Global Trucks headquarters were the first practical sampling part. The main purpose was to attain a general picture over Volvo Global Trucks operations, the Global Sourcing Process and to particularly focus on their sourcing possibilities in India. Additionally, our thesis used Merriam’s approach on how to look at case studies, that one can build or find a theory during or after a study.\textsuperscript{17} The thesis work started with a problem, and that from this we further recognized an informational and theoretical need.

\textbf{2.6.1 Interviews}

Interviewing is a general mean of collecting qualitative data. The main technique for assembling primary data in the thesis has also been through interviews. There are different kinds of interviews or as some entitle them “conversation with a purpose”. However, the most commonly used approach to interviews is the person-to-person encounter. As illustrated in figure 2.2, Merriam makes a distinction between three different kinds of structures when conducting interviews - \emph{highly structured}, \emph{semi-structured} and \emph{unstructured interviews}. Interviews done through questionnaires are categorized as highly

\textsuperscript{16} Merriam, 1998, p.62f

\textsuperscript{17} Merriam, 1998, p.62f
structured while unstructured interviews are more like a conversation. A mix of more and less structured questions is named a semi-structured interview.\textsuperscript{18}

Figure 2.2 - Interview Structure Continuum

<table>
<thead>
<tr>
<th>Highly Structured</th>
<th>Semi-Structured</th>
<th>Unstructured/ Informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Wording of questions pre-determined</td>
<td>- Mix of more- and less-structured questions</td>
<td>- Open-ended questions</td>
</tr>
<tr>
<td>- Order of questions pre-determined</td>
<td></td>
<td>- Flexible, exploratory</td>
</tr>
</tbody>
</table>

Source: Merriam, 1998, p.73

All our interviews were taped and recorded. This approach has both advantages and disadvantages. The principal advantages are that the researcher can get hold of much material and will not lose vital information during an interview. It enables the researcher to listen through the information afterwards and come up with follow up questions for a later occasion. The disadvantages of this technique are that it might not reveal the whole truth, limit possible critique, and body language. Respondents can also sometimes feel uncomfortable with being recorded. However, the respondents tend in the end to forget that they are being taped.\textsuperscript{19}

At the beginning of our research some unstructured interviews were conducted in order to deepen the understanding about Volvo Global Trucks operations and their opinions about our study emphasis. To attain pre-understanding we conducted interviews with individuals positioned at the headquarters of Volvo Global Trucks in Gothenburg. The use of open-ended question and follow up questions led us to new areas of knowledge. It was important at this stage to get a general view over the large and complex Volvo Global Trucks organization. We started off by making semi-structured interviews concerning Volvo Global Trucks and their Global Sourcing Process. Because the concept of global sourcing involves a lot of branch specific knowledge, and internal

\textsuperscript{18} Merriam, 1998, p.72f
\textsuperscript{19} Merriam, 1998, p.81f
organizational knowledge, vast emphasis was focused on obtaining this component.

Semi-structured interviews were held with Professor Hans Jansson and Associate Professor Inge Ivarsson at the Gothenburg School of Economics and Commercial Law, where a discussion around our main problem and techniques on how to approach the problem, posed by Volvo Global Trucks, was addressed. The discussion was related in particular to the chosen formulation of main problem and following research questions.

The following interviews were semi-structure with open-ended answers. We started by interviewing eight persons at Volvo Global Truck headquarters in Gothenburg. These interviews focused around six keywords – Volvo Global Trucks, Volvo Global Trucks in India, Global Sourcing Process, Price, Quality, Logistic and Design. Firstly, the study needed to obtain all the general information concerning Volvo Global Trucks activities on a global level. Two interviews were conducted, one with Anders Iwarson and one with Lars Nomark. Secondly, we focused our interviews’ attention on Volvo Global Trucks’ operations in India and particularly interviews that enabled us to get information concerning purchasing and local issues in India. The additional interviews were focus on the aspects concerning the sub-units, such as price, quality, design and logistics. We knew that these four words were going to be very relevant in our thesis. Therefore, we chose to conduct interviews with respondents who were said to have particular knowledge on the subject.

2.6.2 Classification of Data
There are several levels of data analysis of a case study that are qualitative. According to Merriam, the first step to organize the data in chronological or in topical order and present it in a descriptive manner. Secondly, one classifies the data into some sort of categories, themes or types. Finally, the last step of the analysis involves making inferences, developing models and creating theories.\(^\text{20}\)

In order to classify the theory and our empirical data in a comprehensible manner, we chose to structure these two chapters according to our three-research problem. Although the research problem is related to each other, we felt that this classification was necessary in order to structure the thesis.

2.6.3 Confidentiality
We realized that our thesis was going to examine quite delicate matters and issues for some of the respondents. Consequently Volvo Global Trucks let us sign a confidentiality statement, in which it was explicitly expressed how we were forbidden to reveal any of the information, since we were reading, analyzing and processing sensitive material. Therefore, we chose to ask most respondents if it was anything in the answers that he or she felt could be considered sensitive for him/her, or/and Volvo Global Trucks. To ensure objectivity, we discussed each interview afterwards with each other to check that we had interpreted the information in an intended manner.

2.7 Internal Validity
Internal validity is the question as to which degree the results match reality. The researcher should actually measure what is outlined/planned to be measured. This depends on the researchers’ capability to clarify standpoints and theoretical perspectives and with basis on that current trustworthy interpretation of the activities taken place.\(^\text{21}\) In our study we have presented our viewpoints and assumptions and with this setting we have attempted to give an honest justification of the problem stated.

Our vicious circle was to discover which phenomenon we should ask to get a sketch of what we looked for. The risk was thus that we would have asked for facts that did not exist and therefore our follow-up questions would not be accurately answered. However, as our knowledge emerged as we collected secondary data and interviewed experts in the area, we realized how to pose the questions, and to whom they should be posed to, in order to center the attention in direct relation to the problem. Also, the answers embody what we actually assumed to measure; thereby we argue that we managed to evaluate what we

\(^{21}\) Merriam, 1998, p.177f
initially wanted to appraise. It is our belief that the thesis has a high degree of internal validity, and the result matches the reality.

2.8 External Validity
External validity is the question of whether the empirical findings could be generalized. One way of doing this is to use several external sources and to offer a full description with a variety of input. We have used several sources in order to increase the external validity. However, one should be aware that each case is unique and based on different criteria. This means that the activities and manners that all involved parties have to follow are to a large extent related to the implementation phase of a global supplier in an MNC’s Global Sourcing Process. Thus, all companies facing the stated problem need to follow a similar pattern outlined in this thesis in order to succeed with the implementation of a global supplier. Within that framework, we argue that the study conducted for Volvo Global Trucks can be generalized.

2.9 Reliability
Reliability deals with the issue of the degree to which the investigation would give the same results if repeated. According to Merriam, if the researched area is dynamic, the definition reliability in a conventional meaning is impossible to reach. We do not believe that the variables driving Volvo’s Global Sourcing Process are dynamic, therefore we believe that the mapping of it will be relevant also in the future. Regarding India as parts of Volvo’s global sourcing network, it is our hope that the thesis will enable Volvo Global Trucks to increase the sourcing from India along with cooperation with our conclusions.

A company’s strategy is based on conventional economic theory. This results in that the reader has to realize that it is unreasonable to deviate from conventional economic theory. Furthermore, since strategies as such have their foundation in economic theory, the risk of change is minor or at least very slow. Accordingly, if a similar study were to be conducted with our perspective and methodology it would be expected to give the same results.

22 Merriam, 1998, p.177f
2.10 Our Contribution

There is a vast amount of literature dealing with the issues relevant to global sourcing. Moreover, it is a relatively hot topic in the globalization process, especially considering MNCs, and there are theories suggesting how to analyze the supplier relationship. However, the literature on implementing a global supplier is microscopic, therefore we are confident that our contribution will be of high value, not only to the academic society but also to MNCs feeling a need to improve the Global Sourcing Process.

In the origin of our study we experienced a variety of opinions, depending on whom we interviewed, and as time went by we were able to shape our own expertise in the field and funnel our academic and practical focus from our own perspective. Moreover, the variation of responses from our interviews showed that there was a need for research in the field. We supplied our thesis with vital inputs from theory as well as observations, which provided a foundation for our analysis.

Our contribution to academic society is therefore how to abbreviate and improve the implementation process of a supplier. Thus, we attempted to provide an understanding of the forces within the supplier implementation process, particularly connected to Volvo Global Trucks and its relations towards India. Moreover, in our analysis and recommendations, we do not only supply practical recommendations of where potential weaknesses are located in the process, but also put explicit emphasis on how to implement them.
2.11 Outline of the Thesis

As illustrated in figure 2.3, we commenced our thesis by defining our problem and describing the background on which the thesis is based. We structured the main problem into three research questions that will be analyzed later on in this thesis. In order to receive a better understanding for the complexity of the problem and where it is rooted, the discussion will start with the theory concerning the subject matter. This will naturally require a description of the development of both micro as well as macro factors involved in the process, which will be discussed in the following sections ahead. Consequently, by our empirical findings the reader will have essential background information to be able to comprehend the complexity of the problems, and to be able to follow our thoughts in the analysis, conclusions and recommendations.

Source: Own

Figure 2.3 - Thesis Outline
THEORETICAL FRAMEWORK
3. THEORETICAL FRAMEWORK

Our intention in this chapter is to present the theories in a logical and practical manner by introducing them according to our research problems. Consequently, we will first introduce relevant theories to global sourcing in order to create a general understanding of what this concept is all about. From there we will present theories closely linked to our second research problem concerning the Indian culture and its impact on the Global Sourcing Process. Theories related to our last Research Problem deal primarily with theories relevant to how/if the Global Sourcing Process needs to be changed.

3.1 Theory – Research Problem A

“What does the global sourcing process look like, in relation to suppliers in emerging markets?”

3.1.1 The Role of Purchasing

During the 80s the role of purchasing behaviour became clear as having a substantial effect on company revenue and was crucial for the competitiveness of the firm. A firm’s purchasing behaviour has always been seen as important, but it was during the 80s that both Swedish and American literature started to highlight the real value of the concept. The most prominent driving force for the increase of significance is the strong reliance on outsourcing. During the last few decades, firms have become gradually more concentrated and specialized. Companies have chosen to limit themselves on core activities. In so doing, they have come to rely more on purchasing and suppliers. To make a widespread view of the effect that purchasing has on a company’s strategic competition status, we have chosen to use Axelsson and Håkansson's Purchasing Role Model. They make a distinction between two strategic roles in purchasing: the rationalization role and the developmental role.\(^{24}\)/\(^{25}\)

\(^{24}\) Gadde & Håkansson, 1993, p.7ff
\(^{25}\) Gadde & Håkansson, 2001, p 4ff
3.1.1.1 The Rationalization Role
The rationalization role in purchasing deals with the day-to-day activities that are pursued by the company to reduce cost successively. For instance, improving/reducing cost associated with various flows, finding new solution for technical and other problems. Håkansson/Gadde have identified three types of rationalization activities among firms. The first one relates to finding out what needs to be purchased. These are decisions to purchase or manufacture in-house, as well as the design of the products/components, which are to be purchased. The second aspect of rationalization concerns material flow, which particularly was focused on during the 80s. Vast rationalization benefits are achieved in terms of reducing inventory storage. Here, purchasing played a key role in the expansion of production systems based on the Just-in-Time thinking. The third type of rationalization gain found was related to the finding of new or different suppliers, specially focusing on less costly suppliers, making it possible to keep price down. Although Håkansson & Gadde mean that this role is important, it seems to be less primary today then before.26

3.1.1.2 The Developmental Role
Suppliers are in this role identified as an extremely important developmental resource. In some cases, purchasing companies tend to wait for the supplier to develop new solution before taking the purchasing decision (proactive purchasing). However, some purchasing companies take a more active role in the development of suppliers. This is referred to by Håkansson & Gadde as “the developmental role” of purchasing. Advantages by taking this role are e.g., better coordination, increased developmental power and time savings. Overall, one can say that there are many factors that speak in favour for closer co-operation and benefits for both parties. Håkansson/Gadde also identified that the developmental role of purchasing, and closer co-operation, as a trend have increased over time. Increased fragmentation and increase specialization of the production systems have made it harder to solely develop and maintain knowledge in all these fields. Another important factor is to strive for shorten lead times for design and development. Competitive advantage can be better

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26 Gadde & Håkansson, 1993, p.7ff
accomplished if the development-work between customers and supplier are co-
ordinated.27

3.1.2 Global Sourcing Theory
In the continuous search for cutting costs, MNCs are urged to make use of
terminology such as economies of scale, outsourcing and low cost labor.
Together these create the foundation of the theory for global sourcing. In order
to adequately utilize the concept, an MNC has to carefully develop its global
sourcing strategy in which its resources fit, and with care utilize it in its
planned operations. In other words, the internal resources have to be aligned
with the global sourcing strategy to find a strategic fit.

Sourcing can be defined as scanning/screening activity for suppliers, and as
such, global sourcing relates to the ability of a manufacturing company to
widen its choice of potential suppliers to a worldwide scale. In this sense, the
vendor selection menu becomes global in scope rather than local.

According to Jeremy Howells, as illustrated in table 3.1, there are eight trend
factors that define the development of global supply.28 It is important to bear
these general trends in mind, when trying to analyze the concept of global
sourcing.

Table 3.1 - Trends in global supply

| 1) Increased status and significance – especially focus on quality and timely delivery |
| 2) Geographical expansion of sourcing (“global sourcing”) |
| 3) Coordination of purchasing supply – on a global or continental basis |
| 4) Supply standardization |
| 5) Reduction in the number of suppliers |
| 6) Greater concentration of production (supply localization) |
| 7) Less emphasis on cost, more on quality |
| 8) Exchange rate/currency counteraction – via global sourcing |


27 Gadde & Håkansson, 1993, p.7ff
The company benefits of global sourcing are that it extends the number of potential “best practice” suppliers that a company can deal with. It may also initiate more competition between impending global suppliers, and can permit admittance to suppliers based in countries which have a lead in specific technologies and/or manufacturing practices for a particular component or product. In addition, if global sourcing is adopted with a more centralized purchasing policy, additional functional advantages may occur. For instance, such a benefit is the development of greater technical specialization of purchasing staff. Another advantage is the arising cost benefit due to the consolidation of smaller materials requirement batches from individual divisions or establishments into one large purchase batch. Global sourcing also allows easier purchasing coordination and control, particularly via technical standardization of suppliers and more effective long-term planning and technical research on new components.\textsuperscript{29}

3.1.3 Global Sourcing Process – Volvo Global Trucks

There is one model at Volvo Global Trucks that summarizes the company’s thoughts concerning global sourcing, and the process of implementing suppliers – The Global Sourcing Process (GSP).

"The Global Sourcing Process is a systemized sourcing and decision process for all parts bought within Global Trucks, to secure that the strength and possibilities of the world wide organization is used to find the best suppliers and meet or exceed the targets” - Volvo Global Trucks

Each supplier who is supposed to go through the tryout of Volvo Global Trucks’ Global Sourcing Process (GSP) has to be presented in front of a Global Sourcing Committee (GSC) on three occasions throughout the process by its responsible primary buyer (project manager).

Volvo Global Trucks makes use of global sourcing theory, and has modified it to fit its specific global sourcing requirements. In its execution, as illustrated in figure 3.1, the model developed by Volvo Global Trucks is divided into eight

\textsuperscript{29} Howells, 1993, p.110ff
different stages, where each stage represents its own tasks and sub-actions of the process.

*Figure 3.1 - The Global Sourcing Process*

1. Process Initiation
2. Early specification & target cost
3. Evaluation of potential suppliers (GSC 1)
4. Request for quotation and supplier feedback
5. Evaluation
6. Negotiation
7. Create pre proposal (GSC 2)
8. Final Negotiation (GSC 3)

Source: Intranet Volvo Global Trucks
3.2 Theory – Research Problem B

“How does the local environment influence the global sourcing process, in emerging markets?”

3.2.1 The Institutional Network Approach
As important as knowing the rules when playing soccer, mapping the societal context in which an enterprise is operating is fundamental, advantageous, and creates a competitive advantage. The environment surrounding an enterprise can, according to Jansson, be seen in terms of the institutional setup. In order to be successful in this respect, the organization (the internal enterprise) needs to be aligned with its external institutional setup. In other words, an enterprise has to acclimatize its controllable factors (internal enterprise) to the uncontrollable factors (external environment) to be most competitive in its industry, and be in the best position to exploit market opportunities.\(^{30}\)

An environment can either be seen as a threat or as an opportunity for an enterprise. An enterprise’s home country environment – as defined by its demand structure, resource availability, political structure, values and beliefs – shapes the type of economic activity in which the enterprise is active, as well as its behavior. A foreign market can provide new ideas for the whole enterprise, and thereby enhance its overall competitiveness.

By what is mentioned above, an enterprise’s competitiveness is directed by:

1) The core functional/technical knowledge of the enterprise
2) The accumulated knowledge that the enterprise has of the business environment in institutional disparate countries/markets.
3) The extent to which the enterprise can design its internal institutional setup, in order to respond effectively to the requirements of its external institutional setup.

To be categorized as a truly multinational enterprise, a company needs to be able to cope with the benefits from various foreign environments. However,

\(^{30}\) Jansson, 2001
when a company becomes really multinational, its label loses much of its original meaning since it has to behave in accordance with specific individual foreign environment contexts.

The human being seems to follow patterns that are repeated over time. We behave the same way as yesterday, and we do not tend to change tomorrow. This type of “static behavior” is deeply rooted in our societal setting and also depends on the social groupings to which we belong. If elaborated, exactly who, or what is constructing these patterns? The answer lies in societal institutions, established by humans over time. The concept of institutionalization deals with organizational behavior, the rules behind, how they form, change and disappear. In other words, one who can give answers to the concept of institutionalization more easily can comprehend how the society is organized.

Among academics, keywords like habits, routines, rules, procedures and conventions are commonly used when describing institutions. This implies that human behavior is habitual and constant. However, an institution may also include family, clan, organization, nation, market, game or ceremony, since all these institutions tend to set up governing frameworks, as well as values and beliefs in society.

Main characteristics of institutions are:
1) their organizing nature
2) their ability to facilitate and constrain relations among individuals and groups
3) their degree of predictability

One can divide the institutions into three levels of description or jurisdictions: micro, meso, and macro institutions. The only one that can act on its own among these three is the micro institution, and is therefore defined as institutional agent. Figure 3.2 is viewed from a micro institutional point of view, where the micro institutional agent is found in the core and is encircled by the institutions affecting it. How the micro institution is organized depends upon how its environment is organized.
3.2.2 Hofstede’s Four Cultural Dimensions
Hofstede is most well known for his work on four dimensions of cultural variability, commonly referred to as “Hofstede’s Dimensions”. These include: Uncertainty Avoidance, Power Distance, Masculinity-Femininity, Individualism-Collectivism, and Confucian Dynamism. These dimensions were arrived in his 1980 publication – “Culture’s consequences: International differences in work related values.” The study took existing survey data (samples size of 116 000) collected from a multinational corporation. The result was a score in each of the dimensions for 40 different countries.  

3.2.2.1 Uncertainty Avoidance
This dimension refers to how comfortable people feel towards ambiguity. Cultures which rank low, in contrast to other countries, feel much more comfortable with the unknown. As a result, high uncertainty avoidance cultures prefer formal rules and any uncertainty can express itself in higher anxiety than those from low uncertainty avoidance cultures.

Source: Jansson, 2001
3.2.2.2 Power Distance
According to Hofstede & Bond, power distance is defined “as the extent to which the less powerful members of institutions and organizations accept that power is distributed unequally”. In other words, people in high power distance cultures are much more comfortable with a larger status differential than low power distance cultures.

3.2.2.3 Masculinity-Femininity
Highly masculine cultures value power, assertiveness, heroism, and find motivation in achievement, performance, recognition, and admiration of the strong. In contrast, Hofstede found that highly feminine cultures tend to value people, modesty, quality of life, nurturance, and find motivation in solidarity, relationships, and sympathy for the weak.

3.2.2.4 Individualism-Collectivism
In individualistic cultures (low context cultures), people give priority to their personal goals, even these goals conflict with those of their family, friends, and country. In contrast, people in collectivistic cultures (high context) give priority to group goals. In individualistic cultures, the unit of analysis is the individual where self is autonomous and separate from the other group. An individual can be member of many groups (socialist, hockey fan, etc.), yet no one defines the individual identity as whole. On the other hand, in collectivistic cultures, the self is not autonomous and often defined in connection with the group (Marxist, Swedish, etc.). Individuals are attached to fewer groups, but attachment is very strong and highly defining of one’s identity.
3.3 Theory – Research Problem C

"Will the global sourcing process need to be changed, when being implemented for global suppliers in emerging markets?"

3.3.1 Supplier Structures
Companies tend to follow specific structural supplier patterns in the establishment of their supplier strategies. Today one can see four different general strategy solutions, working as a foundation throughout the entire value chain. These four most common solutions, or strategies are:

1) Encourage existing suppliers to internationalise with them, and locate plants near to their factories.
2) Encourage new suppliers to locate new (or relocate existing) plants overseas in order to supply products or components.
3) Encourage existing suppliers to establish major distribution/warehousing facilities nearby.
4) Concentrate production to fewer sites, where the best mix of existing suppliers are located for that particular product or product group.

The international differences according to supplier relations are in a general and very static manner – especially in the automotive sector – exceptionally special. Companies’ supply strategies are evolving, however, at the side of wider organizational change. In general, around 60 percent of total value added of final products within the automotive sector is sourced from a limited number of direct suppliers who, in turn, are supplied by a larger number of smaller subcontractors and 2nd tier suppliers.\(^\text{32}\) As illustrated in figure 3.3, in major Japanese companies, quite clear supplier tiers can be recognized, with only comparatively small numbers of primary contractors having direct contact with the lead manufacturer.

\(^{32}\) Howells & Wood, 1993, p.110ff
In contrast, as demonstrated in figure 3.4, for most US and European companies this hierarchical pattern is less structured, with the number of direct suppliers being very much larger than their Japanese counterparts.

The supplier linkages within industries have recently gained primary focus. The focus on improved performance in terms of suppliers and subcontractors has showed gains in quality, reductions in manufacturing costs, increased productivity, and improvements of delivery times. Obviously, only the ones that are able to utilize the supply system to its maximum will make these gains.

The purchasing function within most companies has only evolved in a very gradual way, firmly rooted in past traditions and behaviours. Most contacts are maintained with existing, familiar suppliers, while little search or scanning is undertaken for new suppliers, where existing searching, is based on highly localized and partial scans. Few companies have the ability or the resources to undertake global sourcing programmes to find new improved suppliers. Figure
3.5 gives an example of a typical supplier structure, where one can see the different supplier tiers.

*Figure 3.5 - Example of a Typical Supplier Structure*

![Supplier Structure Diagram]

*Source: Howell & Wood, 1993, p.112 (modified)*

### 3.3.2 Purchasing – Reactive vs. Proactive Approach

The purchasing role of companies has historically tended to be reactive rather than proactive, only affecting suppliers by playing them off against each other’s in terms of price. No particular effort has been put into developing suppliers in a certain direction. However, during the recent decade this approach has been widely criticized. On the selling side, companies have always tried to encourage customers to develop their behavior in a certain direction. Today, this approach can be transferred to purchasing, and the relationship between buyer and supplier. Greater benefits can be obtained if a buyer can persuade the vendor to adapt to the customer specific situation - through mutual adaptation. Purchasing companies have the possibility to influence a situation quite considerably, e.g. a supplier.

However, the supplier must find it worth investing money, time, and the other resources necessary for more interaction. Additionally, the supplier must redirect some of their attention away from other customers, because the supplier’s resources for interaction are limited. By redirecting some of the
supplier’s resources towards one company, the supplier must be convinced that this relationship would become more profitable.\textsuperscript{33}

### 3.3.3 Centralization vs. Decentralization

How MNCs’ purchasing operations are organized is very much related to the question of whether to centralize or decentralize. According to Håkansson & Gadde, one can observe a shift in the perception of the pros and cons of different organizational arrangements. During the 80s, and until the mid 90s, purchasing Departments have generally been organized towards small profit centers and decentralized responsibilities. The various business units became responsible for their own financial situation, and it evidently became not possible to decide what suppliers to use on a central level. As a result, large centralized purchasing Departments were not so common.

However, the so called “pendulum swing” is now moving away from decentralization. The advantages of consolidation are the driving force among companies and purchasers. Buying companies of the 21\textsuperscript{st} century are trying to obtain the benefits of horizontal integration, driven by the increasing mergers & acquisitions. The larger a company is, the more benefits can be achieved through centralization e.g. increased discounts, rebates and negotiation power. However, merging companies often make use of different suppliers. Therefore, the total amount of used suppliers in a merged company has increased substantially. As a result, there has been created a considerable potential for rationalization and focus on reducing the total number of suppliers.

Although Håkansson & Gadde argue that the pendulum is moving towards centralization, it will not swing back to the same positions as before. What they imply is that it will gradually become more important to encourage cooperation among the various business units and try to combine the benefits of centralization and decentralization. They conclude by stating that the choice between centralization and decentralization is always a compromise.\textsuperscript{34}

\textsuperscript{33} Håkansson & Gadde, 2001, p.100f
\textsuperscript{34} Håkansson & Gadde, 2001, p.32f
3.3.4 Purchasing Strategies

The problems with purchasing product parts in emerging markets are often different from those that occur in industrialized nations. Cultural differences set higher demands on skills of communication; the legal framework puts higher pressure on both import and local content. Additionally, it can be hard to find suppliers that can fit the standard that the MNC requires concerning technology, quality and price. The problems are often influenced by the countries industrial development level and industrial policies. MNCs are often expected to buy as much as possible in a host country. However, it is important that an MNC’s local production is competitive otherwise their own product will not be profitable in the end.\(^{35}\)

Demand of local content varies quite a lot between the emerging markets, depending on every country/state industrial policy. The quantity an MNC buys locally for their production facilities can, as illustrated in figure 3.6, be divided into four categories, depending upon how rigid the regulations are in each country.

*Figure 3.6 - Degree of Regulation*

<table>
<thead>
<tr>
<th>Extreme</th>
<th>Hard</th>
<th>Normal</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>- State interferes directly.</td>
<td>- State limits the quantity of imported</td>
<td>- Some tariffs on imported products</td>
<td>- No Customs</td>
</tr>
<tr>
<td>- Steers what product that are</td>
<td>products.</td>
<td>- State influences the choice between imports</td>
<td>- No state interference of purchasing</td>
</tr>
<tr>
<td>allowed to be imported.</td>
<td></td>
<td>and local production.</td>
<td>decisions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- No state interference, as long as the MNC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>stays within the limits</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Jansson, 1998, p.169*

- Very strictly regulated: The state interferes directly and steers which products that are allowed to be imported.

\(^{35}\) Jansson, 1988, p.166
- Theoretical Framework -

- Strictly: The state sets limits of the amount of imported products. As long as the MNC acts inside these limits they can decide what should be imported and produced locally.

- Normally regulated: The state sets certain tariffs on imported products and thereby influences the choice between imports and local production.

- Un regulated: No customs or state influence of purchasing decisions. The MNC, decides what should be imported or bought locally.

Depending upon the MNC’s internal production structure and aspects in their environment, influence the choice of purchasing strategy. The type of required product is an important delimitation in the purchasing strategy. A distinction between technology intensive products and capacity intensive products can by theory be made. Technological products can either be imported or bought locally, while capacity intensive products can be a part of their own production or locally bought. Their production of technology intensive products requires vertical backward integration and investment in equipment, personnel and should therefore be viewed in a long-term perspective to be profitable.

### 3.3.5 Status of Purchasing

Another type of management intervention in order to create changes driven from purchasing organization is to enhance the status of purchasing. Historically, purchasing has had very low status, created from a perception that the function has been developed out of the administrative and inventory operation of a company. Additionally, it has been argued that the function has been held back in the organization due to the perception of it being under the direction of the production manager. It has also been supposed that the purchasing area was set-aside in the corporate group, which has created recruitment problems.

These attitudes have continued to impact on the position of purchasing as a function. However, changes due to increased insight concerning the function’s
strategic importance, have gradually been improved. Today, most purchasing managers directly account to corporate management.\textsuperscript{36}

3.3.6 Internal Organizational Structure and Internal Interaction
The interactions between internal actors in a company network are dependent on the organization of the business units and Departments. There are many pros and cons in having centralized vs. decentralized purchasing organization. The main internal reason for having a centralized purchasing organization is that it promotes professionalism among buyers and that resources may be allocated more efficiently. On the other hand, a decentralized organization is said to create more integration between buyers, people form manufacturing and engineering, which simplifies interaction. Another reason for increased interaction is that the purchasing staff can contribute to improved performance in design and product development, if they are involved earlier in the process.

Increasing interaction within the internal organization of companies has during the past decade increased substantially. Although increased interaction between purchasing and engineering provides benefits, there are still problems. In general, these problems can be linked to differences in the culture of functions. According to a study by Bonoma and Zaltman\textsuperscript{37}, engineers perceived purchasers as focusing too much on cost, while purchasers perceived the engineers as overlooking the cost for the benefit of technical performance. Each function perceives it as if the other is invading on its specific area of competence. This is even today very much valid.

In order to handle this source of potential conflict, management intervention is essential. The first obvious requirement is an understanding of the reasons for the changes by the actors. The management’s ability in communicating the reasons underlying a new structure is clearly the most vital part. Additionally is it vital that e.g., a purchaser has a background from other positions. The skills of purchasing are today much more multifaceted and complex than before. In order to reduce cultural clashes as the game changes requires that the actors

\textsuperscript{36} Gadde & Håkansson, 2001, p.110f

\textsuperscript{37} Gadde & Håkansson, 2001, p.109
have the ability to discover, link and manage it. A new kind of professional purchaser is defined:

“The new design responsibilities required of purchasing create a natural need for a new breed of purchasing professional, one who is technically competent, has multifunctional skills, capable of working in a team atmosphere and is able to take control of design project and manage it through completion”.

### 3.3.7 Interfirm Linkages

MNCs develop linkages with domestic corporations as they operate in foreign markets. As illustrated in figure 3.7, vertical linkages affect companies situated either below or above the specific focal company in the vertical production chain, and are referred to as backward and forward linkages. Due to forces in the marketplace, the production of MNCs may also indirectly affect linkages between companies in other industries. Furthermore, linkage effects can, in the form of direct or indirect effects, have the possibility to affect an economy as a whole. For instance, linkages can have effects on employment, income distribution, balance of payments, industrial infrastructure, and localization of industries.

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**Figure 3.7 - Different Linkages and Linkage Effects**

![Diagram](Image)

*Source: Jansson, 1982, p.6*

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38 Gadde & Håkansson, 2001, p.108ff
39 Gadde & Håkansson, 2001, p.110
40 Jansson, 1982, p.4f
These linkages are also relevant to refer to in the process of establishing legitimacy in an MNC’s operative environment. According to Maurer, legitimacy can be defined as “the process whereby an organization justifies to a peer or subordinate system its right to exist, that is, to continue to import, transform, and export energy, material, or information.”

In its extension, legitimacy can be further elaborated into moral legitimacy. It can be gained by fulfilling the societal needs that exists where the MNC performs its activities locally and in its surroundings.

Additionally, moral legitimacy can during operations be connected to the area of Corporate Social Responsibility (CSR). An MNC, which incorporates CSR, can enhance its abilities to gain moral legitimacy in the society. According to Alkhafaji, CSR is defined as:

“Corporate social responsibility is the obligation that corporations have toward their stakeholders and the society at large, which goes beyond what is prescribed by law or union contracts.”

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41 Björckebaum & Säle, 1999, p.82
42 Björckebaum & Säle, 1999, p.39
This chapter intends to present our empirical findings, by presenting the outcome in our three research problems. Firstly, we set up a general background concerning our case company Volvo Global Trucks and their activities in India. Secondly, we will address each of our three research problems by giving the empirical finding to each question respectively.

4.1 General Company Background

4.1.1 The Volvo Group
Volvo Group was founded in 1927, and is one of the world’s largest manufacturers of trucks, buses and construction equipment and holds top positions in the fields of marine and industrial power system and aircraft engine components. Volvo Group has more than 75,000 employees, production in 25 countries and operates on more than 185 markets. The Group’s total sales in year 2000 amounted to 130 billion SEK.

*Figure 4.1 - Organization Chart*

*Source: Volvo Global Trucks Intranet*
In 1999, the Volvo Group decided to solely focus on transport equipment for commercial use, said to generate the conditions for enlarged synergies and improved competitiveness. During this year their product program was transformed to further focus on Volvo’s core values – quality, safety and environmental care. Additionally, the groups were service operations being developed and matched with customer-oriented total solutions, covering finance, leasing, insurance and service.\textsuperscript{43}

### 4.1.2 The Case Company – Volvo Global Trucks

On January 2, 2001, Volvo Global Trucks was organized to incorporate all the Volvo Group’s truck operations. Volvo Global Trucks comprises American Mack Trucks Inc, French Renault V.I and Volvo Trucks as well as 3P (Product Planning, Purchasing and Product Development of all the three brands). The three brands are today kept separate and still compete. However, the brands are joining forces in product planning and development, which makes it possible to develop common product platforms and create considerable cost savings. Volvo Global Trucks is presently Europe’s largest, and the world’s second largest, manufacturer of heavy trucks and has sales of over 180,000 vehicles a year.

With an aggressive approach on new technologies and market channels, such as telematics and e-business, the Volvo Global Trucks is expected to strengthen its position on the global truck market. In addition, Volvo Global Trucks is expected to play a central role in establishing the Volvo Group’s vision of “being valued as the world’s leading provider of transport solutions.”\textsuperscript{44}

### 4.1.3 Volvo’s Scope of Activity in India

During 1995 Volvo launched the project of establishing a manufacturing plant for heavy commercial vehicles in Hoskote, near Bangalore in India. The project got approval in February 1997, and the first sample was approved from Sweden in February 1998. The factory was complete in May 1998 and the first truck was offline on the 15th of June 1998. This plant manufactures heavy commercial vehicles with a gross vehicle weight of over 16 tonnes.

\textsuperscript{43} www.volvo.com
\textsuperscript{44} www.auto.indiamart.com
The plant in India is expected to eventually develop its operation as a part in Volvos global production and distribution system. This means that the vehicles, components and services would be sourced from India for assembly and application at an international scale – global sourcing. Additionally, Volvo Global Trucks believes that the increasingly technological awareness in India will make the country a more ideal base for production and global sourcing.45,46

The manufacturing plant in Bangalore currently has 340 employees, and has a manufacturing capacity of 4000 units per annum. However, the volumes expected for the year 2001 are 450 vehicles. Among the 340 employees, 200 of them are factory workers and 140 employees handle administrative tasks.47

4.1.4 Volvo’s Objective in India
The objective in India is to provide economic transport solution in consonance with its core values of quality, safety and environmental care. Volvo Global Truck’s objective is to increase and promote the market segment of multi-axle vehicles were they today have a market share of 4-5 percent. However, Volvo Global Trucks expects to occupy a market share of 25-30 percent within a 5-6 year period in the Indian marketplace.48

4.1.5 How to Compete in the Indian Marketplace
It is not only the price alone but also the overall cost of operating the vehicle (cost per tonne-km), which is said to determine a customer’s decision to purchase. A Volvo truck is generally more expensive than its other competitors. However, a typical Volvo tractor-trailer can carry 4-5 times more load and do 50-100 percent more kilometers per month. This means higher business revenues and a productivity of over 400 percent. According to Prabudh, Volvo does not have any direct product competitors in India. There are no competitors that are active in their product segment.49

45 www.volvo.com
46 www.automeet.com
47 Interview with Muralidhar, S, Volvo India Ltd, Oct 19, 2001
48 www.volvotrucks.volvo.com
49 Interview with Prabudh, P, Volvo India Ltd, Oct 17, 2001
Additionally, Volvo emphasizes that their trucks will ensure suitable service and parts support. Volvo Preventive Maintenance Schedule ensures four planned service occasions every year for the trucks. This maintenance schedule does not only check the vehicle for existing concerns, but also for any additional problems that could arise on route. The goal is to prevent unplanned stops during its operation. Backing this programme is a Volvo Action Service, a 24-hour help line, which Volvo drivers can contact in the case of an unexpected breakdown.\footnote{www.volvotrucks.volvocom}
4.2 Research Problem A

This section will present our empirical findings linked to what the Global Sourcing Process looks like, in relation to suppliers in emerging markets. The chapter will give a detailed description of the different stages in the Global Sourcing Process. It finalizes by giving the empirical findings on GSP and emerging markets, and some key success factors in Volvo Global Trucks’ GSP.

4.2.1 Global Sourcing

Many industries are today striving for global sourcing in their search for lowering costs. Global sourcing is becoming a guiding principle, involving a special supply relationship between the producer and the supplier, which supplies all of its client’s factories, or at least have the potential to do so, wherever they are located worldwide. Global sourcing permits reliance on a supplier of international scale, which has the essential capabilities since it has developed basic competencies and possesses adequate financial resources to invest in R&D, and to innovate by offering new components. Moreover, it also allows the possibility of cost cutting, thanks to economies of scale permitted by increased volumes. According to Lars Nomark, Volvo Global Trucks can make use of suppliers from emerging markets to a greater extent than today.

4.2.2 The History of GSP

Volvo’s Global Sourcing Process (GSP) was created in 1996 due to the fact that Volvo Truck felt that there was a need to create a standardized way of finding world-class suppliers globally. Before GSP, there were a lot of parts that were bought in small volumes. As for now, the GSP cutting costs, due to the fact of economies of scale. Volvo’s Global Sourcing Process is a decision making process for all parts that are bought from suppliers within Volvo Global Trucks. Each of Volvo’s suppliers has gone through the eight-step decision model. The model was nothing new in itself, however it was a way to put the sourcing process on paper. There was clearly a need for standardization.

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51 Humphrey, 2000, p.84f
52 Interview with Nomark, L, Volvo Global Trucks, Oct 3, 2001
In the creation the process was to general, not taking into consideration the significant differences there could be between suppliers, product parts, segments etc. Some suppliers may, for instance, go through the process in a month, and for some suppliers it may take 2-3 years before they are in actual production.

The saving potentials have since then been identified as substantial. For instance, according to Hans Emanuel, GSP has resulted in a substantial cost cutting. In some cases the savings per part have been more then 50 percent. There is no doubt that the GSP has meant a change in Volvo Global Trucks’ sourcing strategy.

4.2.3 Volvo Global Sourcing Process (GSP)

The main document that Volvo Global Trucks is using in their global purchasing Department is the Global Sourcing Process. According to Volvo Global Trucks, the Global Sourcing Process is defined as:

“The Global Sourcing Process is a systemized sourcing and decision process for all parts bought within Global Trucks, to secure that the strength and possibilities of the world wide organization is used to find the best suppliers and meet or exceed the targets”

Source: Volvo Global Trucks Intranet

Both existing and new suppliers can go through the model in their efforts to attain a global character. One would presume that there would be a difference between an already existing Volvo supplier and a new one. However, the requirements on a global supplier are always the same.

Each supplier who is supposed to go through the tryout of Global Sourcing Process (GSP) has to be presented in front of a Global Sourcing Committee (GSC), on three occasions. A so-called primary buyer conducts the presentation. It is included in a buyer’s responsibilities to find the supplier, and it is his task to promote the implementation. Additionally, a buyer at Volvo

53 Interview with Emanuel, H, Volvo Global Trucks, Oct 10, 2001
Global Trucks has in his duties to find world-class suppliers at minimum price. The Global Sourcing Committee can in this case be said to represent the decision making function at Volvo Global Trucks. The buyer presents the potential global suppliers for the Committee, and the Committee must give the buyer a “go ahead”.

In its execution, the GSP-model illustrated in figure 4.2, developed by Volvo Global Trucks, is divided into eight different stages, where each stage represents its own tasks and sub-actions of the process. Every stage in the process is followed by a number of check-ups.

*Figure 4.2 - The Global Sourcing Process*

<table>
<thead>
<tr>
<th>Sub-processes</th>
</tr>
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<tbody>
<tr>
<td>1. Process Initiation</td>
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<tr>
<td>2. Early specification &amp; target cost</td>
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<tr>
<td>3. Evaluation of potential suppliers (GSC 1)</td>
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<tr>
<td>4. Request for quotation and supplier feedback</td>
</tr>
<tr>
<td>5. Evaluation</td>
</tr>
<tr>
<td>6. Negotiation</td>
</tr>
<tr>
<td>7. Create pre proposal (GSC 2)</td>
</tr>
<tr>
<td>8. Final Negotiation (GSC 3)</td>
</tr>
</tbody>
</table>

*Source: Volvo Global Trucks Intranet*

### 4.2.4 The Global Sourcing Committee (GSC)

The Global Sourcing Committee’s (GSC) primary responsibility is to be prepared and updated on the different cases handled in the meetings so as to be able to contribute with their thoughts, and opinions, when taking decisions in GSC. The members also carry the responsibility to contribute to the establishment of a Global Sourcing Process while lifting parts and/or functions for a global investigation according to rules and routines for the Global Sourcing Process. Purchasing units within Volvo Global Trucks shall, within the common global objectives and methods specified in the Global Purchasing Manual, contribute to the development of efficient methods to provide quality assured and cost effective parts and components.
Each supplier case is presented on three occasions to the Committee according to the following:

1. **GSC1: Presentation and approval of “Potential Supplier List”**.
   a) Review proposal
   b) Agree or propose alternative actions

2. **GSC2: Decision: Presentation of Negotiation Status Report (NSR).**
   a) Review supplier
   b) Agree or propose alternative actions

3. **GSC3: Final Negotiation Report (FNR).**
   a) Determine a Global Purchasing Policy and Guidelines for all purchasing units of Volvo Truck Corporation
   b) Determine an optimized Supplier Structure
   c) Report yearly about the purchasing results

**4.2.5 The Global Sourcing Process and Its Stages**

In order for the reader to get a more detailed overview over the GSP, we have chosen to describe the process in accordance with the three different stages stated above.

**4.2.5.1 Preparation of Potential Supplier List (PSL)**

The primary buyer (project manager), located at the Gothenburg headquarters, is responsible for coordination with local buyers to identify potential suppliers globally. The primary buyer contacts his/her colleagues in the different purchasing organizations via the Global Purchasing System (GPS) to get their proposals for potential suppliers. When answers are received in the GPS the primary buyer prints the Potential Supplier List (PSL) and presents it to the Committee, which is illustrated in figure 4.3. The Committee will then hopefully give a “go ahead” at this stage.
Up to this point the primary buyer has covered 3 out of 8 steps:

- Process initiation
- Early specification & target cost
- Evaluation of potential suppliers (GSC 1)

4.2.5.2 Preparation of Negotiation Status Report (NSR)
After having presented and evaluated the potential global supplier in GSC 1, the primary buyer creates a Request For Quotation (RFQ) within the GPS. That is if the case is run in GPS.

The Request for Quotation (RFQ) is the document that is sent out to the potential global suppliers to ask for price, tooling costs and lead-times for parts, e.g., lead-time from order to delivery of initial samples. The RFQ is used for new parts, in case of drawing revision; change of suppliers or in volumes. The RFQ should include the following:

- Part number
- Drawing number (if other than part no) and issue
- Quantity (in most cases the yearly usage)
- Inform when the parts are requested in production.
- Technical Regulations/Specifications

Thereafter the primary buyer sends inquires to the local buyers via the Global Purchasing System (GPS) and the local buyers then send out RFQs, and other relevant technical documents, to the concerned suppliers within his/her responsible geographical area.
When the answers to the quotations are received, each buyer updates the GPS to make sure that all information is available for all parties involved in the sourcing activities. The local buyers also send a so-called “local ready” message to the primary buyer in order to confirm that they have updated the GPS.

The Quality and Logistic Departments should conduct such an evaluation in the event that a “hot” supplier, at this time, has not yet been SEM\textsuperscript{55} evaluated. At this stage it is also time to get input from the Logistic Department, concerning logistic aspects for the recommendation of a supplier.

The primary buyer should also evaluate the quotations, run a logistic calculation in the system or with help from Volvo Transport, update the NSR with a recommended supplier, and run a case-summary in the GPS system. The NSR, or case summary, is then presented in GSC 2.

*Figure 4.4 - Second phase of Global Sourcing Committee*

At this point the primary buyer has covered the following steps:

- Request for quotation and supplier feedback
- Evaluation
- Negotiation
- Create pre proposal (GSC 2)

*New Parts*

Before presenting new parts in GSC 2, the primary buyer must have approval from the Design Department. Moreover, he also has to get approval from the
Quality, Logistics, and Purchasing Departments, since their involvement in the process is a must in order to make a recommendation of a supplier for GSC 2.

*Parts in Running Production*
Parts that already are in running production have the same process as new parts, except that the Design Department does not have to approve. That is as long as the part does not require any technical changes.

4.2.5.3 *Final Negotiation Report (FNR)*
As illustrated in figure 4.5, before going up in the GSC for the 3rd time the primary buyer has to make the final negotiation. Then in GSC 3 the process involves summing up and closing the case, and after the primary buyer has presented his Final Negotiation Report (FNR), it is the Chairman’s responsibility to reach a finalized agreement and await feedback.

*Figure 4.5 - Final phase of Global Sourcing Committee*

4.2.6 *Supplier Evaluation Model (SEM)*
As a part of the Global Sourcing Process a supplier evaluation model (SEM) in Volvo Global Trucks is used to evaluate a potential supplier. This model is one of the key documents in the Volvo Global Sourcing Process. The SEM is a tool that shall compromise all aspects that are important for a well working cooperation between the Volvo Global Trucks and its supplier. Existing, as well as new or potential suppliers, are included. Evaluation shall be carried out on a regular basis; some data of type operative results should be updated on an annual basis while a full evaluation is done with a frequency decided within each company. There is an exchange of planning and results between the Volvo companies.
The SEM is the cornerstone in Volvo Global Trucks Global Sourcing Process, and it’s a useful tool to get the general overview of a supplier. As illustrated in figure 4.6, the SEM is focused on four main areas of evaluation:

*Figure 4.6 - The Supplier Evaluation Model*

According to the evaluation, each supplier gets a score, which works as a groundwork for further establishment in the relationship between Volvo and their supplier. If a supplier is supposed to become a global supplier, it is a prerequisite that the supplier has achieved more than 50 points out of 100.

*Figure 4.7 - SEM Grading*

<table>
<thead>
<tr>
<th>Grade</th>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>&gt;80%</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>50-80%</td>
</tr>
<tr>
<td>C</td>
<td>Not Acceptable</td>
<td>&lt;50%</td>
</tr>
</tbody>
</table>

*Source: Volvo Global Trucks Intranet*

In order to make an illustrative example from the 40-page SEM document, table 4.1 shows how a supplier is evaluated concerning its global ability.

*Table 4.1 - Global Ability of Supplier*
Global suppliers have the ability to supply Volvo Group on all continents where Volvo Group is active. The supplier can also build up activities locally, if required.

Continental suppliers have activities in one continent, and in addition, have extensive experience in global export and support.

Regional suppliers are present and make deliveries within one region. Additionally, the supplier has some experience in supporting within one continent.

Local suppliers are acting only on a one to one basis with customers.\footnote{Supplier Evaluation Model (SEM), Volvo Global Trucks Intranet}

### 4.2.6 GSP and Emerging Markets

Volvo Global Trucks has taken the stand that there should be no difference in sourcing from industrialized countries or from emerging ones, regarding GSP. The objective is to find the best suppliers globally. Volvo is currently sourcing approximately 3 percent of their global sourcing from emerging markets. According to Lars Nomark, this figure is rather low in comparison to other companies in the automotive industry.\footnote{Interview with Nomark, L, Volvo Global Trucks, Oct 3, 2001} Volvo Global Trucks has therefore started to discuss how to further utilize the suppliers that exist in the emerging markets. Our thesis is one part in this process. Volvo Global Trucks has, for instance, started to identify potential new suppliers in emerging markets and started to create a team responsible to speed up the implementation phase.
According to Lars Nomark, there is no problem in finding new world-class suppliers from emerging markets; it is the actual implementation of them that takes time.

According to Roger Börjesson, Volvo Global Trucks needs to strengthen the focus on sourcing from emerging markets.\(^5\)\(^8\) The saving potentials are considerable and he believes that Volvo Global Trucks should start to focus on labor-intensive products in particular. Work intensive product in this case involves castings and forgings etc. When sourcing from emerging markets there is always the additional cost for logistic and traveling cost that the buyer must take into consideration. In those segments where labor is more then 15-20 percent of a product’s total cost, one should definitely consider sourcing from emerging markets.

According to Humphrey, the future development of the truck industry in emerging markets is mainly dependent on three sets of factors. The first set concerns the policy choices made by other global truck companies. These include investments and production strategies, follow design and follow sourcing, as well as supplier-assembler relationships. The second set of factors is uncontrollable ones dealing with macroeconomic, regional, and environmental policies established on a governmental level. Finally, the third set of factors is the explicit characteristics and links between production and demand in emerging markets. The accuracy of a future forecast of the industry will be heavily dependent on the ways in which the global strategies cope with these local aspects.\(^5\)\(^9\)

### 4.2.7 Key Success Factors when Sourcing from Emerging Markets

Although there are no differences regarding the Global Sourcing Process when implementing suppliers from Europe or emerging markets, there are differences that one as a buyer needs to take into consideration. According to Roger Börjesson, it is very important that one has experience from working with and in emerging markets. When conducting an evaluation of a supplier in an emerging market there are particular considerations concerning e.g., political

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58 Interview with Börjesson, R, Volvo Global Trucks, Oct 13, 2001
59 Humphrey, 2000, p.84f
stability, infrastructure, quality, culture and logistic matters, that need to be focused on. However, factors concerning political stability, economic stability etc., is evaluated in a more ad hoc manner. It is up to the buyer to decide how much emphasis is put on evaluation of macro environmental factors.

Additionally, it can be important to control that all work environmental issues at the supplier facility are solved. According to Roger Börjesson, the list of what to particularly focus on can, regarding suppliers in emerging markets, be very extensive. However, Roger Börjesson emphasizes that one needs to have experience from these environments and use common sense.
4.3 Research Problem B

In this section we will present our empirical findings related to how the local environment influences the global sourcing process, in emerging markets. Consequently, this part of the empirical study describes the Indian environment in which Volvo Global Trucks sourcing from.

4.3.1 Institutional Analysis

The Institutional Analysis is divided into two segments, societal sectors and the organizational field. We have chosen to describe these factors from an outside-in perspective, only describing particulars of special meaning for Volvo Global Trucks. (See modified figure 4.8).

*Figure 4.8 - Institutional Model*

4.3.1.1 Societal Sector

*Country Culture*

India’s culture is deeply rooted in the society. It is often referred to as an ancient civilization, but a new nation. The values and attitudes of its citizens, the nature of its political culture, and its political processes are heavily influenced by both its traditional past, its existing democratic institutions and of
the uniqueness of their culture, which is the foundation of the identity of its people.

India is a large country with an approximated population of over 1 billion inhabitants and more than 1600 languages spoken, divided among the 26 different states. As a consequence, the states differ widely in terms of economic performances, natural resources, and administrative capacity. Additionally, each of the states consist of different regional, social, religious and economic groups with different cultural practices, which suggests that Volvo Global Trucks should consider each state as an individual market. The official language is Hindu but English has official status. This is obviously a characteristic that is in favor for Volvo when conducting global sourcing from India. However, the personal relationships in India can be observed both in the professional and private life. This opens up for bribes and corruption in the society.

Hofstede’s model focuses on the underlying values of culture groups that directly affect relationships, work and social values. Hofstede’s four dimensions try to describe work-related attitudes across cultures. The next section describes the Indian culture in relation to these four dimensions.

Uncertainty Avoidance
The uncertainty avoidance dimension focuses on how far culture socialise their member into accepting various situations and tolerating uncertainty for the future. Significant for low uncertainty avoidance are a low degree of job stress, greater risk-toleration and less emotional resistance to change. For instance, in comparison to Sweden, India is in general seen as a more collectivistic society, with higher uncertainty avoidance.

Power Distance
Power distance is the extent to which less powerful members of institutions and organizations within a country expect and accept that power is distributed

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60 www.tradeport.org
61 www.tradeport.org
62 Hofstede, 1991
unequally. Power distance also describes the extent to which employees accept that superiors have more power than they have. In countries with high power distance employees are too afraid to express their doubts and disagreements with their autocratic and paternalistic bosses. The index for power distance describes the dependence of relationships in a country. India’s power distance is in general rather large, with strong hierarchies and power centralised at the top.\textsuperscript{63} Their society is hierarchical, whether you live in the north or south; Hindu or Muslim, urban or village, virtually all things, people and groups are ranked according to various essential qualities.\textsuperscript{64} The Indian society has been described as a country where you live by the ascribed status rather than the achieved status. In countries, like India, where status is more seen as ascribed, titles are often more frequently used and the respect for opponents is high. Cast like groups are to be found everywhere in the Indian society and in most villages and towns. Everyone knows the relative ranking of each locally represented caste and his or her behaviour is shaped by this knowledge. Even in the family you can generally state that there is a form of hierarchy. Men outrank women of the same or similar age, and senior relatives outrank junior relatives.

Concerning the power distance within the Volvo organisation in India, one cannot say that it is characterised in the traditional Indian way. One should rather describe it as a traditional Volvo corporate culture.\textsuperscript{65} However, when working in the Indian business climate, for instance, concerning relationships with local institutions, government associations and suppliers, it can be useful to have knowledge about the relatively high power distance in the Indian culture.

*Masculine vs. Feminine Society*
This dimension indicates the extent to which dominant values in a society tend to be assertive and look more interested in things than in concern for people and the quality of life. The Masculinity and Femininity dimension describes how cultures differentiate or not between gender roles.

\textsuperscript{63} Hofstede, 1991  
\textsuperscript{64} www.tradeport.org,  
\textsuperscript{65} Interview with Condos, J, Volvo India Ltd. Oct 24, 2001
Masculinity and femininity are rather equivalent in India, although masculinity has a slightly more dominant role. In other words, there are both large groups valuing wealth, earning money and assertiveness as most important, as well as groups advocating interdependence between people and caring for others. Economic suffering has created the need for double-income families, a need that has been accounting for changes in social behavior.

The masculine feature of India tends to be ambitious and a need to excel. Members belonging to this category have a tendency to polarize and consider big and fast to be beautiful. In workplaces employees emphasize their work to a great extent (live in order to work) and they admire achievers who have accomplished their tasks. Those in the Indian society belonging to the feminine category consider quality of life and helping others to be very important. Working is basically to earn money, which is necessary for living. In business as well as in private life they strive for consensus and develop sympathy for people who are in trouble. Small and slow are considered to be beautiful. Volvo should pay attention to these trends as conducting business in the Indian society concerning negotiation aspects, lobbying activities etc.

**High vs. Low Context**

India is a high-context, analogue culture in which nonverbal language is extremely important. Social norms and principles stemming from religious beliefs and the interplay of factors such as politics, economy, geographical, and human diversity are important components of contextual information in Indian communication. As mentioned above, India is a collectivist society that seeks the preservation of harmony within each group. The combination of these factors emphasizes the importance of how a message is communicated in addition to what is communicated and which context must be taken into consideration to draw meaning. Complaints about Indian inconsistency may stem from the fact that Indians may give different responses to the same issue on different occasions. This happens because of variations in the contextual information or to avoid in-group confrontations. Indians need flexibility to respond to changes in situational factors and this explains their disregard for corporate rules and policies and their eventual spontaneous attitudes.
However, we find it important not to make a general conclusion relating to MNCs and Volvo’s activities in India. According to Condos, characteristics and differences in the general Indian culture can often be misinterpreted. He argues that the differences stated above are important to have knowledge about, but not to be generalized as typical traits for MNCs operating in India.\textsuperscript{66}

\textit{Religion}

In strong uncertainty avoidance countries, religions tend to be intolerant to others beliefs. In relatively low uncertainty avoidance countries like India, religions tend to be more tolerant. This is especially true about Hinduism, a religion adopted by approximately 80 percent of Indians.\textsuperscript{67} Hinduism believes that there only is one united universe, and in the existence of one truth that may be voiced through different religions. Hinduism commonly accepts gods of other religions as incarnations of its own gods. Principles of acceptance and tolerance of differences learned during the acquisition of religious values in early childhood make Indians especially gifted to maintain tolerance towards deviant ideas.

There is today a vast amount of different belief systems throughout the country of India. The most dominant religion is Hinduism with 82 percent of the population followed by 12,1 percent of Islam. In comparison to the Swedish religious practices, the impact of the religions that India encompasses is far more dominated among the ordinary people. Its values are to a great extent influencing everything from moral, ethics to behavior and self-confidence.

According to Condos, religious practices are something that is apparent also among some of the employees at Volvo India Ltd. Although one employee may practice a praying ceremony five times a day, it never has impact on their daily activities. “Religion is never something that causes any disturbance, as long as everyone shows respect to the cultural differences”.\textsuperscript{68} The administrative office of Volvo India consists of people coming from different countries and states

\textsuperscript{66} Interview with Condos, J, Volvo India Ltd. Oct 24, 2001
\textsuperscript{67} www.tradeport.org
\textsuperscript{68} Interview with Condos, J, Volvo India Ltd. Oct 24, 2001
with different religious backgrounds. Once again, it is Volvo’s corporate culture and beliefs that are foremost at the office and not different individual religious beliefs.

Another example of religions impact on business that we came aware of during our field study in India was the celebration of Pooja, where the employees show their gratitude to the machine and tools. At one of the supplier visits, the factory’s production halted and workers held a ceremony of worship.

It is important for Volvo Global Trucks to recognize the role that religion plays in the Indian society. Moreover, an awareness of the potential conflicts between different religions is important, as there is a risk of these affecting workplace conditions and atmosphere. In turn, the relationship between Hindus and Muslims should be carefully monitored as to be aware of potential clashes. Finally, respect and understanding of the existing religions in a supplier relationship is vital in order to understand values, norms and codes of conduct. However, that religion would have a substantial impact on Volvo’s Global Sourcing activities in India should not be concluded.

**Business Mores**

Business mores in India can be segregated into two distinct categories – historically family-owned businesses, and professional companies. Many MNCs have established their operations in India, and therefore constitutes for the dominant part of the dynamic professional companies. These MNCs have introduced western business mores, which has been absorbed by the Indian people. Concerning the bureaucracy in India, one can say that it is widespread, extensive and bad for business. It is also worth mentioning that there exists corruption and bribes in the Indian society.\(^69\)

Personal relationships are very important in India, which can be noticed by that written contracts are often valued less than relationship contracts based on mutual trust. A reason for this is that in cultures with long time frames, firms are in general seeking to develop relationships before conducting business.\(^70\)

\(^69\) www.pwcglobal.com  
\(^70\) www.executiveplanetet.com
An interesting point to mention is the concept of time. The notion of “time is money” has, in comparison to the western economies, less importance and is almost impossible to get across to the Indian business partner. Meetings, for instance, can by delayed and one should not be surprised if one has to be kept waiting.

Meetings can also be interrupted by phone calls, signing of documents etc. This is a way for the Indian Manager to show his importance and status in the organization. For a foreign businessman it can be demanding to remain concentrated during such a meeting.

It is not unusual that business takes place during holidays in India, and they will expect the same of foreigners. This is the case due to the fact that in India they value work higher than home and family. The reason for this is because the Indian society is a collectivistic society; the company is a member of the extended family structure. Managers in turn can be extremely generous at the cost of the company and most often set off resources, for instance, in form of time to make foreigners and visitors feel well treated.

Traveling in India can, from a western perspective, be seen as extremely complicated. The roads and public transportation do not have the same standards, and delays are not unusual. Road network growth has not kept pace with the mushrooming vehicle population. A study conducted by the National Highway Authority of India (NHAI) shows that the vehicle population has increase hundred-fold, while the length of roads has increased only seven-fold. As a consequence, the Indian businessman has got used to long hours of traveling. A foreigner visiting India for the first time must have an understanding concerning this factor when traveling in India.

The official language in India is English, and it is therefore a comfortable business environment for the western business people in which one always can make oneself understood. Although there exist very many different dialects of
the many languages spoken in India, there is most often no problem concerning
communication in the streets. However, there is some difference in suburban
and rural areas. For the future, the globalization process will most probably
continue to affect the Indians and the Indian way of conducting business.
However, this process will most likely go faster in urban areas.

**Interest Organizations**
There are mainly five different interest organizations that are relevant for
Volvo Global Trucks to be able to comprehend. The next section describes
these five organizations.

*Association of International Automotive Manufacturers, Inc (AIAM)*
Members of the Association of International Automotive Manufacturers, Inc.
(AIAM) distributes world-class passenger cars, multipurpose passenger
vehicles, and light trucks in the United States. AIAM acts as the common voice
concerning information for the U.S. subsidiaries of these international
automotive companies. AIAM also represents several original equipment
manufacturers doing business in the United States. The organization
communicates the true makeup of today’s American automotive industry and
creates an awareness of the contributions international automotive
manufacturers make in America. AIAM also promotes auto related issues
before government regulatory agencies.\(^\text{72}\)

*Society of Indian Automotive Manufacturers (SIAM)*
The Society of Indian Automotive Manufacturers (SIAM) is the peak national
association on behalf of the Auto Industry. Incorporated as AIAM over 39
years ago, it has given the industry a social face, with increasing emphasis on
environment and safety related issues. SIAM was formed in 1998, and all the
members of AIAM have now become its members, in addition to 3 new
members.

SIAM is an important channel of communication for the Automotive Industry
with the government, national and international organizations. The society also

\(^{72}\) [www.aiam.org](http://www.aiam.org)
aims to play a proactive role in creating awareness on important matters like Road Safety and Environment Protection. SIAM is also committed to the advancement of automotive technology in India.  

**The Automotive Component Manufacturers Association of India (ACMA)**
The Automotive Component Manufacturers Association of India (ACMA), with a membership of over 365 companies, has been the Indian auto component industry’s spokesman for the last 38 years. ACMA has a membership of over 365 companies that contribute 90 percent of the total output in the organized sector. The Association's active involvement in trade promotion, technology upgrade, quality enhancement, and collection and dissemination of information has made it a vital catalyst for the progress of the industry. ACMA is represented on a number of panels, committees and councils of the Government of India through which it helps in the formulation of policies pertaining to the Indian automotive industry.

**The Western India Automotive Association (WIAA)**
The Western India Automotive Association (WIAA) was founded on October 15th 1919, and today is the largest and the oldest motoring body with over forty-eight thousand members, and a network of seven branches in four states of Western India. The WIAA - Castrol Institute of Motoring at Ahmedabad is equipped with state of art equipment and aims at carrying out research on Road Safety and giving training on road safety to all users of the road.

The Western India Automotive Association is the largest Automotive Association in South Asia. Its current membership is to the tune of 48,000 members today and the scope of its activities extends to cover major cities in Western India. The Association has its headquarters in Mumbai, and offers its services in the states of Maharashtra, Gujarat, Rajasthan, Madhya Pradesh and Goa. It has six branch offices apart from the headquarters in Mumbai, and offers to all its members a wide variety of services ranging from issuing of learners’ licenses to legal advice on motoring issues.

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73 [www.siamindia.com](http://www.siamindia.com)
74 [www.acmainfo.com](http://www.acmainfo.com)
The Association also undertakes to promote tourism within the country. In its very first decade of existence, the Association built up over 1400 routes covering nearly half a million miles. The WIAA is actively in touch with its counterparts in other countries, giving them the necessary travel information as a part of its program to attract tourists in India. The WIAA also has reciprocal service arrangements with other Automotive Associations and Clubs all over the world. The Association is recognized as India’s major authority on motoring issues and represents its members and motorists interests to the Government and other sector and industry groups.\footnote{www.cybersteering.com}

\textit{Federation of Automotive Dealers Associations (FADA)}

This is the first Indian Association formed by the dealer community in January 1964 and signified the urge of India’s automotive dealer community to have their own identity and a national organization of their own. FADA provides an all India platform to promote and safeguard legitimate business interests of the auto dealer community.\footnote{www.cybersteering.com}

4.3.1.2 Conclusion Societal Sector

India is a multicultural society, where different religious beliefs are having a large impact on the society and the everyday life of the people. The close personal relationship opens up the way for bribes and corruption, in businesses as well as in the entire society.

However, Volvo Global Trucks has a strict policy, forbidding any involvement in activities that might be called corruption. This sometimes results in applications and permits being “delayed” as Volvo Global Trucks does not comply with certain government officials and other’ demands in form of gifts, money or other favors.\footnote{Björckebaum & Säle, 1999, p.70} Volvo Global Trucks has recognized this but is being patient and, if necessary, takes the matter to a higher level in the bureaucracy in order to get application or permit approval.

\footnote{www.cybersteering.com} \footnote{www.cybersteering.com} \footnote{Björckebaum & Säle, 1999, p.70}
Moreover, it is of value for Volvo Global Trucks to acknowledge the different interest organizations, as well as the government’s involvement in drawing up policies that directly, or indirectly, are related to the automotive industry. Bearing these factors in mind will enhance the comprehension of the societal field, enable to make use of arising opportunities in the Indian society, and perhaps shorten the implementation of the GSP, due to increased understanding and an enhanced degree of acceptance to deviations.

A deep understanding of all these cultural factors and paying attention to them is vital for Volvo considering using potential Indian suppliers as global suppliers.

**4.3.1.3 Organizational Fields**

**Political Structure & Policies**

The Republic of India is a federal republic, governed under the constitution, and shows many features that can be traced to the system of UK and the United States. Each state has its own identity, which can to a certain extent be seen as even more important than the country as a whole. Although, the central government has authority over the different states, the power of the states has, during the last decade, substantially increased. Between the federal and the state government there can often be forms of disagreement that can be both hard and dynamic. This can make the political process particularly slow and attaining government approval often can take long time. It is important to be aware of this disturbance when Volvo considers negotiating with government concerning applications and permit approvals.

As a result of the autonomy of the unlike state in India, one can distinguish different rules concerning FDI. There are today six primary states heading towards free markets and globalization; Delhi, Maharashtra, Karnataka, Tamil Nadu, Gujarat and Andhra Pradesh. States like Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh are even today very protective and do not constitute an attractive climate for foreign investment.

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78 [www.encarta.com](http://www.encarta.com)
79 [www.automeet.com](http://www.automeet.com)
The political structure’s strong support from its citizens creates an environment, which does not abandon its core values and beliefs. This creates stability, which is desirable, especially in a country with a relatively short democratic history. Moreover, the tolerance towards foreigners is a very important aspect of the Indian society for an MNC such as Volvo Global Trucks. The society puts certain demands on Volvo Global Trucks, but does not discriminate due to the company’s foreign origin. Knowledge concerning its values, norms and influence on society as a whole is imperative. Furthermore, it is important for Volvo Global Trucks to come to terms with the complex hierarchical structures present in politics and administration.

Policies
Policies vary quite a lot between the emerging markets, depending on every country/state industrial policy. According to Jansson, the quantity an MNC buys from emerging markets is dependent upon how rigid the regulation in each country is. In India some states are less friendly in their approach towards MNCs, while others have chosen to use tariffs more extensively.

Although the political landscape seems to change frequently, is it still an important feature for MNCs operating in India. India is today regarded as a democracy, but it cannot yet be compared to the democracy western countries entail. After a decade of socialism, India became bankrupt which created a starting point for the liberalization process. The present policies have been fairly transparent and geared towards promoting domestic and foreign investment. Many MNCs have identified these policies as a significant key success factor under building their presence in India. However, issues like reduction of subsidies, labor law reform, poverty and the bureaucracy in India are often perceived by MNCs as the major obstacle in the country. India will continue to pursue the liberalization in the future, however the process will certainly be carried out for a substantial time period.

Jansson, 1998, p.166ff
Karnataka State Policy

After the announcement of a New Industrial Policy 1996-2001 by the Government of India, a formulation of an exclusive Industrial Promotion Policy and Action Plan for the development and growth of the automotive sector in the State of Karnataka was initiated. Today, in cooperation with KPMG, certain focused areas for development have been identified.\(^{81}\)

Macro economic imperatives

The automotive industry is one of the world’s largest industries, accounting for approximately 5 percent of GDP in some developed economies. During the last decades, a number of developing countries (including India) have focused around the automotive sector as a drive for economic development. India has during the recent years witnessed a number of global auto companies making an entry on the market. MNCs like General Motors, Ford, Volvo, Hyundai, Chrysler and Toyota are today present on the Indian market. The benefits of the automotive industry as a host in the economy are substantial, primarily because of the enormous backward and forward linkages of this industry. Additional benefits of investment in the automotive industry are as follows:

- Fast development of key linkage industries like Steel, Plastic and Paints
- Improvement in the technological and related skills levels in various supporting industries
- Increased exports
- Increased revenues for the State of Karnataka
- Other multiplier benefits of improved road transportation

Additionally, the State of Karnataka, with its historical automotive and engineering base, is well positioned for significant investment in this sector. It is believed that the State of Karnataka has seen the vast economic potential of this industry for the future development.\(^{82}\)

\(^{81}\) Draft Policy For Automotive Industries Sector, State of Karnataka, Sept 1999
\(^{82}\) Draft Policy For Automotive Industries Sector, State of Karnataka, Sept 1999
**Strategic possibilities**
The pillars, according to KPMG, in the Government of Karnataka automotive policy are:
- The state will sharply focus on automotive component manufacturers for further investment promotion in the automotive industry.
- The key players to be pursued are manufacturers of bulk and critical components.
- The State will create specialized infrastructure for modern automotive components units to be set up.
- The State will ensure that the package of incentives offered for fresh investments will be comparable across other competing States.
- The State will set in motion an ongoing process for streamlining regulatory procedures associated with setting up and running operations for automotive industry projects.

Additionally major domestic and international auto components manufacturers will more seriously examine Karnataka as a location considering the presence of large OEMs in the state. However, infrastructure support and the perception of the government’s support towards suppliers will be a necessary pre-condition for selecting a specific location for investment in India.\(^{83}\)

**Focus on Component manufacturers**
Large first tier components manufacturers closely follow where the OEMs invest. Therefore, the State of Karnataka incorporates an excellent opportunity to attract those 1st tier firms, who inevitably follow the OEMs that have already entered the region. To attract tier 1 firms the Government of Karnataka should, in co-operation with existing auto industry in the state, develop a clear marketing package for these firms. The objective will be to highlight the strengths of Karnataka as a natural destination for tier 1 investments.\(^{84}\)

After that KPMG presented their study findings to the senior officers of the Government, a draft Auto Policy was formulated. This draft was distributed to

\(^{83}\) Draft Policy For Automotive Industries Sector, State of Karnataka, Sept 1999
\(^{84}\) Draft Policy For Automotive Industries Sector, State of Karnataka, Sept 1999
all concerned Department and agencies, and to the Industry Association and chambers. Additionally, the major automotive industries in the country were asked for suggestions. This resulted in an exclusively formulated Industrial Promotion Policy, which came into force with immediate effect for the State of Karnataka. As shown below, the policy focused around four main cornerstones.

- Specified automotive components manufacturing units will be exempt from payment of Entry Tax for a period of 5-7 years.

- KIADB will establish two auto parks in the Bidadi Industrial area and the Dharwad growth center. Those two areas will have necessary infrastructural facilities, including efficient disposal, uninterrupted water and power supply, other common facilities centers such as post office, telecommunication facilities, banks, commercial complex, police stations, schools, housing and hospitals etc.

- The Government will encourage and assist the establishment of a specialized training institute for the automotive sector through the active association of interested automotive industries. These training institutes will be set up in the Bidadi Industrial Area and Dharwad Growth Centre where the government will provide required land, free of cost and also a token contribution of 10 percent of the initial capital cost. The training institutes will be managed by participating automotive industries and will focus in specified skill areas such as painting, welding, auto mechanical, auto mechanical, auto electrical etc.

A joint government and industry “Auto Guidance Cell” will be set up in order to help investors secure speedy clearances and approvals for the new investment proposals. This auto guidance cell will involve Departments and agencies of the government that would be involved in industrial development activities and chosen industry representatives.85

85 Directorate of Industries & Commerce Bangalore, 2000
**Labor Market**

India has the third largest pool of scientific and technical personnel in the world. The presence of this substantial pool of highly trained professionals attracts foreign companies towards the country. India also possesses the second largest assembly of English speaking scientific, technical and executive manpower in the world. The language is spoken by most of the managerial and technical people, as well as the skilled workers, since many of them have studied or worked abroad.

The labor market is affected by the poverty problem. India still has the world’s largest number of poor people in a single country. Of its 1 billion inhabitants, an estimated 350-400 million are below the poverty line. This obviously creates a very fragmented market. However, about 15 percent of India’s population has a living standard that is in line with, or above EU average level, meaning that at least about 150 million citizens are in line with EU levels, resulting in an huge market.

Payment of Wages Act (1936) and Minimum Wages Act (1948) govern the payment of wages in India. Trained management, technical and skilled personnel are relatively inexpensive. Industrial wages range from $3 per day for unskilled workers, to $50 per day for skilled production workers. The Factories Act regulates working conditions, while the Industrial Disputes Act governs cutbacks, closure and layoffs.\(^{86}\)

Volvo Global Trucks’ relations with labor authorities and unions are good, and focuses more on cooperation instead of conflict. Volvo Global Trucks complies with the rules and regulations, and thus reducing the risk to negative assessments of its conduct, product or services. Sporadically, labor officials come to visit Volvo India Ltd. to see that Volvo Global Trucks is following the rules and regulations Volvo Global Trucks receives visits from. These visits are prearranged and not of the harassing kind that was more common in Indian business life in the pre-liberalization era.\(^{87}\)

\(^{86}\) www.supremecourtonline.com  
\(^{87}\) Björckebaum & Säle, 1999, p.75
Financial Market
The Indian financial market is currently faced with keywords like deregulation, liberalization, and privatization. The financial market of India should be viewed today as an open institution, meaning it is accessible to almost any interested party. There are no restrictions on who is, or is not, allowed benefiting from it. Thus, it is required that anything concerning the capital market has to have the consent of the Reserve Bank of India (RBI), especially in the case of investments coming from abroad.88

Volvo Global Trucks character in the financial market is comparable to the labor market, with small abilities to influence rules and regulations. Up until recently, the banking system was different with fixed interest rates controlled by the central government. Now the situation is changing and Volvo Global Trucks has been given bank loans with floating interest rates with a cap and a floor limit.89

According to global sourcing and the logistics aspects of it, Volvo Global Trucks has experienced some problems with the high customs duties in India. It is tough for Volvo Global Trucks to transport parts from Europe and at the same time stay cost competitive due to the high levels of customs duties.

Product/Service Markets
India can be classified into the three traditional sectors – industry, services and agriculture. These contribute with similar amounts to the GDP. India is the thirteenth largest industrialized nation in the world. The recent liberalization initiatives by the Indian government are expected to further boost industrial growth.

The domestic truck producers TATA and Ashok Leyland dominate the Indian truck market. Due to the low competition in the market, their research and development efforts are sluggish or inactive. Consequently, the quality and standards of their trucks are not very technologically sophisticated. Volvo

88 www.finance.indiamart.com
89 Björckebaum & Säle, 1999, p.75
Global Trucks existence has demonstrated new technology and standards to the supplier base, which has put efforts in the supplier base to live up to and to develop their products.

**4.3.1.4 Conclusion Organizational Field**

Even if the organizational field does not have a direct impact on the Global Sourcing Process, this field indirectly affects the surrounding functions, e.g., when initiating a supplier relationship. For instance, the fact that India is still having problems with bureaucracy and that it is still today a problematic issue within the government can mean that the implementation phase in the GSP takes longer time than initially expected. This could also represent a major inconvenience for Volvo when operating in India in general. However, since these aspects are institutionalized, they will not tend to change in the near future, meaning that Volvo Global Trucks has to adapt.

Volvo Global Trucks has developed good relations with politicians and bureaucrats at state- and central level, who are highly placed in the hierarchy. This is of great importance as it becomes more difficult for, e.g., lower ranked bureaucrats to exercise their influence on Volvo Global Trucks without risking intervention from higher ranked officials.

The process of liberalization results in opportunities for Volvo, although the government still has considerable power in the industry. The potential of India lies in their huge rapidly growing and developing market – not to mention the favorable automotive policies regarding the automotive sector that the government has enforced, especially in Karnataka State. The Indian labor market should be considered as more than sufficient. The language is a particular advantage, and their skills within engineering excessive. The democratic traditions in India diminish the risk for political instability such as coups, military intervention in politics etc.
4.4 Research Problem C

In this section we will present our empirical findings related to whether the global sourcing process needs to be changed, when being implemented for global suppliers in emerging markets. Firstly, the chapter maps Volvo India’s supplier base and its saving potentials. Secondly it gives additional reasons for sourcing from India. The chapter finishes with empirical evidence concerning internal blocks for changing of GSP.

4.4.1 Mapping the Indian Supplier Base
Volvo India Ltd. currently has 64 manufacturing suppliers in India. The supplier base has been assessed according to Supplier Evaluation Model (SEM); where four suppliers are “A-rated” and 53 are “B-rated” suppliers. Two of the suppliers are global and the rest only supply Volvo locally. Of these suppliers, 89 percent are ISO 9000 certified and six percent have achieved the environmental certificate of ISO 14000. All suppliers that source to Volvo India are English speaking.

The Vendor Development Department is responsible for all supplier relations and all purchases for Volvo India Ltd. The Department also carries the responsibility of conducting the SEM-evaluation of the supplier base on a regular basis. There are currently 21 employees at the Vendor Development Department and five of them have the certificate to conduct the SEM-evaluation in India.\(^{90/91}\)

4.4.1.1 Automotive Supplier Regions
Considering the geographical location of Volvo India’s local supplier base, they are mainly located in four distinct regions. To start with, all these regions have one feature in common; they all incorporate big cities. Another notable characteristic, as illustrated in figure 4.9, is that these regions are spread over the whole country from north to south, and from west to east. Interesting to pay attention to is that two of the four regions (northern and the main part of

\(^{90}\) Interview with Muralidhar, S, Volvo India Ltd, Oct 19, 2001
\(^{91}\) Interview with Prashant, P, Volvo India Ltd, Oct 18, 2001
southern region) are not located along the coast, meaning that direct transportation by boat from these regions is not an alternative.

**Figure 4.9 - Geographical Location: Main Supplier Cities**

Considering the geography in India, the distance between the supplier regions is vast. Moreover, the distance from Volvo Global Trucks’ plant in Hoskote to the northern supplier region is approximately 2000 kilometers, while the southern supplier region is located within 450 kilometers.

### 4.4.1.2 Products/Parts
One should have in mind that castings and forgings are the most prominent parts when discussing India’s supplier base. The biggest automotive supplier region, in terms of number of suppliers, is the northern region. This region consists of approximately 160 automotive suppliers. Moreover, the 12 OEMs in the region manufacture cars, tractor, motorcycles, Multi Utility Vehicles (MUVs), and Light Commercial Vehicles (LCVs). In other words, there are not any of the truck OEMs that have a plant in this region. However, close behind the northern region are the western and the southern regions respectively, where a generalization can be made concerning the supplier manufacturing of product and parts.
The western region mainly comprises casting related products. Additionally, this product segment can be divided into two further segments – ferrous and non-ferrous casting products. The region consists of 12 OEMs and around 120 automotive suppliers. The OEMs’ offerings in this region are mainly the same as in the northern region, except that TELCO, the big domestic truck OEM competitor has a plant in the region.

In turn, the southern region’s supplier base main offerings consist of casting producing suppliers, but also incorporate suppliers producing other types, e.g., forgings, plastics, rubber etc. The region is the third largest automotive supplier region among the four, and consists of 10 OEMs and about 90 automotive suppliers.

Volvo India Ltd is located in Hoskote. Consequently, the southern region, together with the western region make them, in the eyes of Volvo India Ltd, the most important ones, mainly due to the type of suppliers in these regions and proximity. It is relevant to mention that Ashok Leyland, the other big domestic truck manufacturer, has a plant in the southern region, making it to the densest region in terms of truck OEMs.

The least significant supplier region is the eastern region. It only incorporates approximately 30 automotive suppliers and two OEMs. However, just like in the western supplier region, TELCO has a plant in the eastern region.\textsuperscript{92}

As already discussed, to obtain cost advantages, parts produced by the automotive supplier base in India should be related to labor-intensive products. However, Volvo’s current main sourcing areas in India are not considered to be labor-intensive production areas. These are illustrated in figure 4.10:

\textsuperscript{92} www.acmainfo.com
4.4.1.3 Potential Supplier List

According to Muralidhar, responsible for Vendor Development India, there are many advantages and opportunities that strengthen the incentives for Volvo Global Trucks to more extensively use the Indian supplier base. The main advantages among the Indian suppliers are their wide engineering skills coupled with low labor cost.⁹³

As a result, Muralidhar outlined a so-called potential supplier list. The objective was to identify suppliers with a saving potential that were particularly attractive to use globally (See Appendix 2). By comparing the Indian supplier price to the Volvo Global Truck price, the total savings amounted to more than 30 million SEK. The identified suppliers have already been assessed according to the SEM, and they were the ones that Muralidhar felt could be implemented on a global scale immediately. Accordingly, Volvo Global Trucks would not need to allocate much resource in order to make use of these suppliers on a global scale.⁹⁴

The potential supplier list consists of 13 Indian suppliers, where the SEM score is in between approximately 55-70 points. The list concerns mainly parts as mud stays, brackets, exhaust pipes, screws etc. In some identified cases could the saving potentials in price be up to 80 percent in comparison to Volvo’s current global price, while some calculations result in negative savings. Evidently, logistical issues and other concerns must be evaluated when

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⁹³ Interview with Muralidhar, S, Volvo India Ltd, Oct 19, 2001
⁹⁴ Interview with Muralidhar, S, Volvo India Ltd, Oct 19, 2001
considering these potential suppliers. However, the saving potentials are in some cases so great that they cannot be neglected.

The following example, figure 4.11, shows one of the identified parts and its savings from the potential supplier list. By using Sundram Fasteners Ltd on a global scale the identified saving potential on the part is approximately 540 000 SEK. This example only shows one type of casting part. Sundram Fasteners Ltd has four other parts that can be supplied to Volvo Global Trucks. By doing so, the total saving will be even more substantial. (See Appendix 2)

Figure 4.11 - Extract from Potential Supplier List

<table>
<thead>
<tr>
<th>Current Global Supplier</th>
<th>Indian Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>Part</td>
<td>Flange Nut M18<em>1,5</em>20</td>
</tr>
<tr>
<td>Volume</td>
<td>58023 pieces</td>
</tr>
<tr>
<td>Price</td>
<td>2.96/piece</td>
</tr>
<tr>
<td>Saving %</td>
<td>62%</td>
</tr>
<tr>
<td><strong>TOTAL SAVING:</strong></td>
<td><strong>541 460 SEK</strong></td>
</tr>
</tbody>
</table>

Source: Own

4.4.2 Factors for Global Sourcing in India

Excluding the saving potential and the technical skills of the Indian labor force, discussed above, this part gives additional empirical findings on why India would be a good place for global sourcing.

4.4.2.1 Competitors

India is an emerging market that during the recent decade has obtained an increasingly larger share of FDI. The automotive industry and particularly the truck industry have viewed India as prosperous market due to the huge market potential, low labor costs and technical skills.

During the recent decade India has also come to take an even larger share in automotive industry’s global sourcing. According to Gopalakrishnan, although Volvo has had a plant in the State of Karnataka for over three years, they are
lagging behind their competitors in terms of global sourcing. Competitors like GM, Ford and Toyota have come to use the State of Karnataka’s suppliers on a much more global scale. These competitors have similar requirements on global suppliers as Volvo Global Trucks, but have been much more progressive in their search and implementation of new ones. He argues that if Volvo is supposed to sustain its competitive advantage in the truck industry, they must utilize potential global suppliers in India.\textsuperscript{95}

\textbf{4.4.2.2 Favorable Governmental Policies}

The State of Karnataka is one of the five states in India that are regarded as FDI-friendly. It is particularly important to mention that the state has, as mentioned above, created an exclusive automotive policy in order to attract more FDI. The policy has been developed in corporation with the major automotive companies. According to documents obtained from the State’s Chamber of Commerce, the State regards the automotive industry as a beneficial host in the economy. This is primarily due to the extensive backward and forward linkages that this industry incorporates. It is highlighted from the government that it is not only important to create an attractive environment for MNC plants, but also toward their first and second tier suppliers as a base for global sourcing.\textsuperscript{96}

\textbf{4.4.2.3 Supplier Mentality}

The suppliers that are used locally in India want to show Volvo Global Trucks that they can produce qualitative parts at a better price. According to Ashok, the Indian suppliers are very eager to become used in Volvo’s global sourcing. Not only the suppliers, but also the whole region of Bangalore want to show the western world that they are just as developed as them. There is, according to Ashok, a willingness to change and learn among suppliers in India. The supplier mentality in India is of fundamental value for Volvo Global Trucks in the implementation of global suppliers.\textsuperscript{97}

\textsuperscript{95} Interview with Gopalakrishnan, N, Dynamatic Technologies Ltd. Oct 22, 2001

\textsuperscript{96} Government of Karnataka, Economic Survey 2000-2001

\textsuperscript{97} Interview with Ashok, B, Volvo India Ltd. Oct 19, 2001
During our visit to two suppliers in the region of Karnataka we perceived the suppliers as being eager to show their best side. One cannot neglect the fact that many of the suppliers in India today have been recognized as global suppliers for other big MNCs. For instance, during our visit to Dynamatic Technologies Ltd the CEO did not understand why Volvo Global Trucks could not put more trust in Indian suppliers. He argued that if Boeing can, why cannot Volvo Global Trucks? He continued to claim that he was certain that Dynamatic Technologies had what it takes to obtain global status in the eyes of Volvo Global Trucks.

4.4.3 Internal Resistance
The obstacles for fully utilize the GSP are related to the internal organization at Volvo Global Trucks. The empirical findings have identified mainly 5 internal factors that will be presented in the following section.

4.4.3.2 Buyer Workload
One important factor that has been argued as response to Volvo Global Trucks relatively low degree of global suppliers from emerging markets is the buyer workload. Buyers at Volvo Global Truck headquarters neither have the time, nor the resources, to implement new suppliers from emerging markets in a efficient manner. It has been argued that it is more complex and more time consuming for the buyer to use suppliers from these remote markets.

4.4.3.3 Organization Attitude and Trust
Suppliers from emerging markets are from some parties in the Volvo Global Trucks organization perceived as more “risky” to use. Some negative attitudes can be traced back to previous bad experiences and the distance between Sweden and the Indian market. These underlying reasons primarily deal with that there must not under any circumstances be a disturbance in the production at Volvo Global Trucks’ assembly plant. Some parties have argued that suppliers from emerging markets involve a larger risk concerning production disturbance, for instance in form of logistics and quality aspects.
4.4.3.4 **Degree of Integration**
An implementation of a global supplier mainly involves five parties – buyer, quality, logistic, design and Volvo locally. Quality, logistics and design have their own so-called sub processes that are a part of the GSP. However, it has been argued that the different functions’ working procedures are not integrated enough with the GSP. The different functions drive their analysis on their own, lacking understanding about the other Department’s processes. In other words, the interaction between the different functions has been argued to create problems, due to differences in the culture of functions.

4.4.3.5 **Information Support**
It has been argued that there does not exist adequate information concerning potential suppliers from emerging markets, explaining the low use and knowledge of potential global suppliers from emerging markets. Volvo Global Trucks does not have reliable information concerning suppliers from these countries.

However, Volvo Global Truck is currently in the process of creating a joint potential supplier database together with Renault and Mack. The buyer is expected to be able to, for instance search by product segments, SEM score and/or region. This is expected to give him access to information in a speedily manner, and at the same time ease the buyer’s workload and fasten the overall implementation period of suppliers from, for instance, India.

4.4.3.6 **Consistency and GSP**
During our interviews at Volvo Global Trucks, we have found that the GSP is not always carried out in a consistent manner. As there are several steps in the GSP, and each step consists of sub-processes, the way a buyer succeeds along this process is complex, consisting of many ways of how to tackle it. It has been argued that the working procedures within GSP have vague boundaries. In other words, the working procedures are not fully standardized, or not consistent, throughout the GSP.
ANALYSIS
5. ANALYSIS

We will in this chapter, based on our theoretical framework and the empirical findings, analyze Volvo Global Trucks’ Global Sourcing Process, the Indian supplier base, identified gaps, and elaborate around legitimacy aspects.

5.1 The Global Sourcing Process
Volvo Global Trucks’ Global Sourcing Process is an instrument in its way of mapping the activities along the process of implementing a global supplier. The GSP is a decision-based process that has standardized Volvo Global Trucks sourcing activities. It comprises all-important aspects, considered when selecting global suppliers.

GSP consists of eight-steps of requirements that the buyer must go through in order to make the supplier global. The buyer at Volvo Global Trucks is the one that is responsible for the actual implementation of a supplier, and he is the one that is supposed to guide the supplier through the different stages.

The buyer is also the one that presents the potential supplier in front of the Global Sourcing Committee, the decision-making organ within the GSP, at three occasions during the GSP. The Global Sourcing Committee then decides if the supplier fulfils those requirements set by Volvo Global Trucks.

Volvo Global Trucks’ Global Sourcing Process involves, in most cases, six different parties: buyer, GSC, logistics, quality, design and Volvo locally. The Departments of Logistics, Quality and Design all have their own sub-processes that are gone through and assessed along the GSP.

There is particularly one part in GSP, which is considered to be the primary evaluation tool for Volvo Global Trucks – the SEM. The buyer, in cooperation with the supplier, fills out the supplier evaluation model. The evaluation
summarizes basic data about the supplier, management systems, competence & experience, and operative results. The supplier gets a grading between 0-100 points, where minimum 50 points are required for global suppliers.

Our empirical findings have found that different stages of the GSP, may be carried out differently among different buyers. Additionally, it has been suggested that the GSP must always be carried out in the same way; otherwise it fails to generate the value of what it is all about. Sourcing from India has for some parties in the organization been regarded as more risky. It is Volvo Global Trucks responsibility to change this perception within the organization, to see that the model followed in practice.

Lack of consistency between implementation in theory and practice will increase the risk for confusion, and uncertainty within the organization can quickly emerge. One of the keywords in our analysis is consistency, meaning that planned activities in the process are to be carried out as initially intended; otherwise the implementation is not legitimate.

An implementation of a supplier at Volvo Global Trucks varies on a case basis, but it is a company’s responsibility to create consistency and reliability throughout a process. We will later, in the conclusion chapter, elaborate on how to create consistency more practically in the implementation phase.

5.1.1 The Role of GSP

Volvo’s global sourcing process role is focused on achieving advantages from centralization. Volvo Global Trucks is today trying to obtain advantages by switching to a global supplier base, increase price pressure on existing suppliers and utilize suppliers in emerging markets.

Although the case of Volvo Global Trucks and GSP is about obtaining the benefits from centralization, it is not a clear-cut case. The choice between centralization and decentralization can be a compromise. Global purchasing for Volvo Global Trucks is not solely conducted in a clear centralized manner. For instance, Volvo Global Trucks incorporates locally purchasing units in India, in
their search for new global suppliers, which is one way to compromise the benefits of centralization and decentralization. By incorporating the locally purchasing units from India into GSP, Volvo Global Trucks minimizes cultural clashes, obtains country specific knowledge, and speeds up the implementation phase of new global suppliers. In those emerging markets where Volvo Global Trucks already has purchasing units locally, knowledge is utilized in a more decentralized manner.

5.1.2 Purchasing as Key Function in GSP
We have in our empirical findings learned that every function in an implementation in the global sourcing process has its own perception of its importance, in contrast to others. For instance, the purchasing function is by some parties perceived as only thinking about price, while logistics is perceived as only looking at figures, without considering what actually takes place outside the office walls. According to Håkansson & Gadde, interaction within the internal organization of companies has during the recent decade increased substantially. The increased demand for interaction between purchasing and the other functions today still creates problems within organizations. These problems have generally been linked to the differences in culture between functions.

If Volvo Global Trucks is to increase the focus on India, it is the purchase function’s responsibility to understand the insights from the other functions’ activities. At the same time, purchasing has the responsibility to spread this wider knowledge to the other concerned parties in an implementation. Purchasing is the key function within the Volvo Global Truck organization, in the implementation of global suppliers. It is their task to address these attitudes and spread insight among concerned parties.

5.2 The Indian Supplier Base
India has the capability of meeting the requirements of being a global supply market. Its supplier base incorporates the mentality where it wants to demonstrate that it is at least as good as the western markets. During our observations and interviews at the Indian suppliers, who had passed Volvo Global Trucks’ supplier evaluation, the suppliers were confident that they
would fulfill the global supplier requirements set by Volvo Global Trucks. The Indian suppliers have proven to incorporate the capability to comply with Volvo’s high standards in form of quality and efficiency. However, the question one might want to ask is why Volvo Global Trucks should move the production to these remote markets. The answer has a multifaceted answer, and there are numerous beneficial reasons why.

5.2.1 Labor Intensive Products
The most evident deep-seated motive in using the Indian supplier base on a global scale obviously deals with cutting costs. It has an outstanding cost benefit concerned with labor costs. Moreover, Volvo can reduce their dependency on the existing supplier base and enable to put price pressure on existing ones by extending their global supplier menu. The presented potential supplier list (See Appendix 2) has proven that there exist substantial saving potentials in India. However, to make use of this strength concerning low cost labor, it is the responsibility of Volvo Global Trucks to put heavy emphasis on labor-intensive products. Our empirical findings have proven that a first-class labor-intensive supplier base exists in India.

5.2.2 Supplier Geography
India’s geographical distribution of the four supplier regions stretches over the whole country, involving all four cardinal points. As a result, the distance between the supplier regions is immense. The fact that the Indian road infrastructure is not in line with western levels, concerning the logistical aspects within the country, can make it difficult and time consuming for Volvo Global Trucks when increasing supply from India.

In general, one can make a distinction between the four automotive supplier regions in India. The biggest automotive supplier region, in terms of number of suppliers, is the northern region. It comprises approximately 160 suppliers and 12 OEMs. However, the most important point to mention is that none of these 12 OEMs are involved in the heavy truck industry.

In the Volvo Global Truck perspective, the western and the southern part of India are of importance. Both regions have almost the same supplier density,
and both regions have the heavy truck industry represented. As mentioned previously, Volvo India has chosen the southern region as a base for their plant. Additionally, Volvo India’s local suppliers are mainly located in the western and southern region of India. Although, Volvo India Ltd. has some suppliers in the northern region, the western and southern regions are the most prominent ones.

5.2.3 The Indian Supplier Base as a Part of the Rationalization Role

The Indian supplier base is continuously evolving as it slowly gains recognition and legitimacy in foreign MNCs. The Indian automotive suppliers are well aware of their capability in their cost competitive offerings. Historically, the purchasing role of companies has tended to be reactive, by taking a rationalization role, only affecting suppliers by playing them off against each other in terms of price. On the other hand, Håkansson and Gadde have identified the developmental role of purchasing and closer cooperation between MNCs and suppliers as a trend that has increased over time.

However, regarding our case study on Volvo Global Trucks and their sourcing activities in India, the rationalization role of purchasing is clearly the most relevant role to refer to. We have during our study become aware of the fact that considerable cost savings can be made by increasing sourcing from India. This is done without taking the developmental approach to purchasing.

The rationalization role becomes interesting mainly due to three reasons. Firstly, Volvo Global Trucks is a relatively small player among their competitors, and there is not a need to develop suppliers by investing money. Competitors already do this. Secondly, there already exists a broad supplier base in India that is used by Volvo Global Trucks’ competitors. Volvo has the possibility to free ride on those suppliers that their global competitors are already using. Thirdly, there is no problem in finding suppliers in India that can live up to those requirements set by Volvo Global Trucks. There is almost no difference between the requirements set by Volvo Global Trucks and their global competitors. Additionally, Volvo has in the case of India a broad supplier base that already delivers locally to the Hoskote plant. These suppliers have already gone through assessments made by Volvo. In other words, Volvo
Global Trucks does not need to allocate so much resource to make the Indian local suppliers global.

Consequently, it is the responsibility of Volvo Global Trucks to concentrate on the actual implementation of suppliers from India. Volvo Global Trucks is today sourcing on a relatively small scale from India, but the thesis has identified its potential. Now it is relevant to discuss on how to pace up the implementation process of them.

5.3 Increasing Focus on Sourcing from India
According to the Potential Supplier List (see Appendix 2) savings will be obtained if Volvo Global Trucks increases its global supply from India. However, if the company is to pursue this increased sourcing approach, the empirical data has suggested some organizational gaps of concern.

5.3.1 Identified Gaps
The next section identifies those gaps that we have found from our empirical study, and felt needed to by addressed by Volvo Global Trucks.

5.3.1.1 Management Support
We have during our study become aware of the fact that their exists some resistance towards sourcing from India by some parties in the Volvo Global Trucks’ internal organization. It’s the task of the management to change this resistance. Currently is only 3 percent of Volvo Global Trucks total global sourcing activities performed from the so-called emerging markets, which is low in comparison to the competitors. Management has not given increased sourcing activities towards India its full support in terms of resources (provide training, skills, information etc). It is not only their responsibility to be committed, but also to sell the concept to the remaining part of the organization so the organization, as illustrated in figure 5.1, works and is aligned in the same direction.
In other words, if the organization does not have its own internal house in order, it is likely that the supplier relationships towards India will not reach optimal status and/or the supplier will not be able to be effective. Management’s responsibility is therefore to develop and establish internal alignment covering the entire relationship life cycle.

The purposes of such a process is:

- Involvement: ensure that all appropriate internal parties are included in the decision-making process in the appropriate manner (e.g., management, buyers, quality, design, logistics, local units, and suppliers)

- Information: ensure that the all involved parties have the necessary information prior to making decisions.

- Communication: ensure that all decisions, and the reasoning behind those decisions, are communicated in a timely and clearly way to all appropriate parties.

5.3.1.2 Willingness to Change Current Practices

First, an unavoidable fact is that Volvo, as an organization, has existed for decades with practices and procedures that are deeply rooted in the organizational structure. One has to be aware of the fact that a change in the supplier base towards India and the remaining emerging markets calls for a change in current practices, as well as an open mind for new suggestions. Secondly, increased supply from India may mean that jobs will be lost in the
western supplier base. Finally, Volvo Global Trucks has to declare to itself that by increasing global sourcing from emerging markets actually means breaking new ground.

5.3.1.3 Willingness to Take Risks

The empirical findings have suggested that some parties within the Volvo organization perceives supply from emerging markets as more risky. Increased supply from emerging markets has been argued to create problems in form of disturbance in the production of trucks.

Changes in a supplier base can cause problems, but it is not related to emerging markets. We have not found any confirmation that increased sourcing from India is going to create problems for Volvo Global Trucks. There may be specific factors that influence, and should be considered when implementing suppliers from India. But it is an organization’s responsibility to come up with answers on how to reduce those specific factors. Changes within organizations are always related with possible problems. These risks have to be reduced as much as possible by implementing an instrument or tool that can identify potential threats.

Some of the unwillingness to take risks within the Volvo Global Truck organization can be transferred to lack of understanding about the emerging markets. It has been argued that the quality standard in India is not as high as in the western markets. The empirical findings suggests that this is inaccurate, regarding the Indian supplier base, and that this is due to the lack of understanding of this market.

One alternative of how to identify risks in Volvo Global Trucks’ operational environment in emerging markets is to make use of the Institutional Model as a descriptive instrument. Buyers at Volvo Global Trucks are currently identifying factors from the model in an implementation of a supplier from emerging market. However, this is done in a more ad hoc manner and it is up to the buyer to decide how much should be analyzed. It is not done in a standardized way, and it is not spread to the different parties in an implementation. This may be
one way to reduce the perception of risk regarding supply from emerging markets.

5.3.1.4 Prejudices
Volvo Global Trucks has ingrained prejudices (in terms of poor quality, late deliveries etc) and has not convinced all parties in the organization about the potentials of emerging markets like India. There have, for instance, been previous bad experiences with parts sourced from India.

The suppliers in India have had trouble being fully accepted in building trust as global suppliers in Volvo Global Trucks. This mentality is obsolete, but still is a process in itself that gradually needs to be worked out. It is not only the issue of suppliers building trust directly towards the purchasers, but also in their indirect relations towards the Volvo organization as a whole.

5.4 Institutional Impact of GSP
As mentioned in the empirical chapter, the institutions in the societal/organizational field do not directly impact the Global Sourcing Process. However, these fields have indirect impact on the process when e.g., initiating a supplier relationship.

5.4.1 Societal Sector
India is a multicultural civilization, where varied religious beliefs are having a large impact on the social order and the everyday life of the people. As presented in the empirical chapter, the close personal relationship opens up the way for bribes and corruption, in businesses as well as in the everyday society. It becomes even more of a concern for the GSP when Volvo Global Trucks establishes linkages and global supplier contracts in the Indian supplier base.

However, according to Björckebaum & Säle, Volvo Global Trucks has a policy, forbidding any association in actions that can be referred to as corruption. This sometimes results in submissions and permits being “postponed” as Volvo Global Trucks does not conform to certain government officials and other demands in form of donations, money or other favors. Volvo Global Trucks has recognized this but is being patient and, if necessary, takes
the matter to a higher level in the bureaucracy in order to get submission or permit approval. Volvo Global Trucks has developed good relations with politicians and bureaucrats at state- and central level, who are highly placed in the political ladder. It is in Volvo Global Trucks’ interest as it becomes more difficult for e.g., lower ranked officials to put into effect their influence on Volvo Global Trucks without risking involvement from superior ranked officials.

Moreover, it is of value for Volvo Global Trucks to acknowledge the different interest organizations, as well as the government’s involvement in drawing up policies that directly, or indirectly, are related to the automotive supplier industry. Bearing these factors in mind enables to comprehend the supplier base development, facilitate to make use of arising opportunities in the Indian society, and perhaps shorten the implementation of the GSP.

5.4.2 Organizational Field
That the government pursues liberalization, although it still has a substantial power in the automotive industry, is influencing the potential supply offerings in India. The favorable automotive policies that are created in the automotive sector, especially in Karnataka, have impact. That the state regards MNC’s global supplier base as having substantial impact on the economy, especially the backward linkages of the automotive industry, is important to point out.

Additionally, the fact that India is still having problems with bureaucracy within the government can mean that the implementation phase in the GSP takes longer than initially expected. This could also represent a major inconvenience for Volvo when operating in India in general. However, since these aspects are institutionalized, they will not tend to change in the near future, meaning that Volvo Global Trucks has to adapt.

The Indian labor market should be considered as more than sufficient, when put in relation to GSP. The supplier base skills within engineering are more then adequate. Finally, the English language is an advantage for Volvo Global Trucks and its suppliers from India. Particularly when put in comparison to suppliers from other emerging markets.
5.5 Legitimacy

Referring to Hans Jansson’s model of “Interfirm Linkages”, an important issue to confront for Volvo Global Trucks is to aim for legitimacy, in its linkages, when using the GSP in the Indian market. The thesis has found that cost savings will be achieved when increasing global supply from India. The GSP is taking a rationalization role of purchasing in its search for lowering the cost per part. However, the role that one takes can have negative impact on a company’s sourcing activities in India. Therefore, it is important that in this pursuit, it does not create problems for Volvo Global Trucks. The answer lies in the company’s ability to create legitimacy in there direct and indirect linkages. Moreover, legitimacy can be obtained as different dimensions: market, government, and moral legitimacy. By analyzing the GSP, the moral legitimacy is the most relevant aspect.

5.5.1 Moral Legitimacy

As discussed in the theoretical framework, moral legitimacy steams from Corporate Social Responsibility. As MNCs are exploring emerging markets, moral legitimacy has increasingly become an important aspect due to that they exist in these markets mainly for one reason – the beneficial cost aspect. The empirical findings have revealed that the GSP takes more of a rationalization role, in contrast to the developmental role. It causes a risk of concern for an underlying conflict when applying the moral legitimacy philosophy into the GSP.

5.5.1.1 Moral Legitimacy in the Direct Linkages

Volvo Global Trucks accounts for the behavior of its business partners in the backward linkages of the production chain. Volvo Global Trucks’ production chain consists of many small and medium-sized local suppliers that also create jobs and pay taxes. They train employees, pay wages, transfer technology and produce trucks that, when considering the whole production chain, involve thousands of industrial workers. What approach Volvo Global Trucks take to their backward linkages when making use of the Indian supplier base, can determine whether or not they are being perceived as obtaining moral legitimacy in India. Examples of moral legitimacy in the backward linkages
include suppliers being asked about the conditions of employment and wages of their suppliers. Business linkages to the Indian market, where products included in the assembled truck are being sourced from the society where low wages, poor conditions, child labor and environmental problems are widespread, are a cause for concern to consumers in the developed economies.

5.5.1.2 Moral Legitimacy in the Indirect Linkages
The daily activity of Volvo’s operations has a deep social impact. The actual power of Volvo Global Trucks to affect the Indian society lies in the vast mix of cash that represents its revenues and expenses. The conception of this link connecting the everyday activity of Volvo Global Trucks and the well being of the Indian society, through the suppliers, is driving the comprehensive approach to moral legitimacy. Through the direct link to the Indian supplier base, Volvo Global Trucks indirectly fulfills the societal needs.

Volvo Global Trucks, through its Indian supplier base, contribute to the development of society. Not only by creating job opportunities, but also contribution to health, infrastructure in India. Additionally, Volvo Global Trucks is influencing, by their values and standards, labor groups and other societal groups.

It is important to understand the Indian institutional setup and that gaining moral legitimacy demands a two-way communication process – claiming and giving – between Volvo Global Trucks and its linkages in the Indian society.

The fact that Volvo Global Trucks has developed good linkages with politicians and bureaucrats at central level, who are highly placed in the hierarchy, also has to be considered as an important linkage. However, it is Volvo Global Trucks’ responsibility not to overlook the fact that many political decisions are taken on state level, resulting in that the importance of establishing good linkages on state level is just as important as having linkages on a central level.
5.5.1.3 Exemplified Legitimacy Case
Björckebaum & Säle illustrate very well how to Volvo obtained legitimacy when it established its plant in Hoskote, India. This example can be transferred to our case, concerning implementation of global suppliers in India.

“In the establishment of the Volvo plant in Hoskote, the community was obviously affected. The need of land for building the plant resulted in that some farmers had to put the land at Volvo’s disposal, by giving them a good price, so they would not feel mistreated in any way. This process was conducted by KIADB (Karnataka Industrial Area Development Board), which was compulsory. This is also a way of avoiding the situation of landowners demanding too high a price, taking advantage of the situation. The landowners cannot refuse to sell the land according to law. They can refuse a price offer but have to come to an agreement after negotiations with the KIADB and the MNC. In the bargaining, Volvo Global Trucks also agreed to hire some of the locals. Preference was also given to locals with the right skills when recruiting personnel for the plant. These actions were taken in order to compensate for the disturbance created by Volvo to the locals. As illustrated, this is a type of bargaining tactic used by Volvo in order to gain legitimacy and accommodate pressures from the local community and its stakeholders. The same type of legitimacy thinking is important to think about when implementing a global supplier in the Indian market.”
CONCLUSIONS
6. CONCLUSIONS

In this chapter we provide the reader with the conceptual discussion regarding our three research problems and our main problem. Although the questions are very much linked to each other, the chapter will answer the questions separately.

6.1 Research Problem A

“What does the global sourcing process look like, in relation to suppliers in emerging markets?”

6.1.1 Global Sourcing Process
Volvo Global Trucks has developed the Global Sourcing Process model as a strategic tool that describes the stages a supplier must go through in order to obtain a global character. Each stage in this eight-step model consists of requirements that the buyer must fulfill in order to carry a case through GSP. The buyer at Volvo Global Trucks is the one who is responsible for the actual implementation of a supplier, and he is the one that are supposed to guide the supplier through the different stages. The buyer is also the one that presents the potential supplier in front of the Global Sourcing Committee, the decision-making organ within the GSP, at three occasions during the GSP. The Global Sourcing Committee then decides, upon the information presented, if the supplier fulfills those requirements set by Volvo Global Trucks.

6.1.2 Involved Parties
Our study has found that Volvo Global Trucks’ Global Sourcing Process in most cases involves six different parties: buyer, GSC, Logistics, Quality, Design and Volvo locally. The Departments of logistics, quality and design all have their own sub-processes that must be walked through and assessed along the GSP. Additionally, the workload between these parties is very much dependent on the potential supplier and what part that should be sourced globally.
The thesis has found that the buyer is always the one that has the greatest responsibility in an implementation.

### 6.1.2 GSP in Relation to Emerging Markets

Regarding emerging markets, Volvo’s Global Sourcing Process makes no distinction between suppliers from emerging and developed markets. The process and requirements of a global supplier are always the same. Our empirical findings have stated that Volvo Global Trucks emphasize on that a supplier from emerging market should not have its own route in GSP. The goal of the GSP is to find the best supplier globally at best quality and price. If the supplier is located in an emerging market or not makes no difference, it is the supplier specific facts, in terms of quality, price, logistics etc., which solely decides if he is supposed to become global.

However, although the assessment on a supplier looks the same wherever he is located in the world, particular parts of the assessment tools are more analyzed in emerging markets. Factors like safety, environment, packaging, logistical aspects etc., can be analyzed more when implementing suppliers from emerging markets. But in general, the basic assessment tools used on supplier are not different in emerging markets. The SEM is, for instance, standardized and is not differently used in India than in the western markets. This tool is the foundation of GSP and has been argued from all interviewed parties as being very important.

### 6.1.4 GSP Taking a Rationalization Role

We have found that Volvo Global Trucks and the GSP, regarding India, take the rationalization role regarding the search for global suppliers in India. Volvo Global Trucks is a small player among their competitors and does not need to take a developmental role since the competitors already do so. Secondly, there already exists a broad supplier base in India that can be used. Volvo Global Trucks can free ride on its competitors. Finally the thesis has revealed that there exists a local supplier base in India that can be used globally. These suppliers have already gone through the assessments made by Volvo. In other words, Volvo Global Trucks does not need to use many resources in order to make
these global. The potential supplier list has also already identified its potential savings from many of the most attractive Indian suppliers.

6.1.5 Saving Potentials in India
Through the analysis of the Indian supplier base, and the identified potential supplier list, India has, as an emerging market, been a case market where the GSP could be utilized more extensively. The saving potentials in using India as a source in Volvo Global Trucks’ global supply network have been proved to be significant. The potential supplier list exemplifies a saving on more than 30 million SEK. Volvo Global Trucks has a possibility to take advantage of these suppliers. When implementing suppliers from emerging markets there are always country and case specific factor that are to be considered. However, the argument that suppliers from India should be seen as more risky to use has not been concluded in our study. On the other hand, we have found that there exists a resistance in the organization toward emerging market. Previously bad experience, prejudice, lack of knowledge, unwillingness to change, can be transferred to this perception about emerging markets.

6.2 Research Problem B

“How does the local environment influence the global sourcing process, in emerging markets?”

6.2.1 Local Environmental Influence
In our study, Jansson’s Institutional Model has shown one approach of how to look upon the institutional framework in India and the contextual environment Volvo Global Trucks operates in. Moreover, the model demonstrated how various institutions have different impact. This is, however, dependent on what type of activity that is supposed to be carried out. In relation to our thesis, which concerns the implementation of global suppliers from the Indian supplier base, we have found that the institutional setting in India mainly has more of an indirect, rather than direct, impact on the Global Sourcing Process. By having this in mind, the institutional framework primarily deals with the understanding of the supplier relationship as such, and correlated aspects.
Moreover, our findings display the environment in which Volvo Global Trucks intends to implement the GSP more extensively when utilizing India as a source.

As stated in our findings, these indirect variables involve: cultural-, political-, operational and financial aspects. However, this thesis has particularly highlighted cultural and political aspects in the institutional framework.

First, when working with the Indian supplier base, knowledge about the Indian culture is relevant. General knowledge about the Indian culture, and its indirect impact on GSP, in terms of country culture and business mores creates an understanding and reduces uncertainty towards the supplier relationship. Additionally, business mores can e.g. transmit deviate codes of conduct, meaning that the purchasers might find it complex to communicate and/or make himself understood.

Secondly, the political indirect impact on the GSP primarily deals with the complex bureaucracy in India. As our study has amplified, the administrative aspects in India can be very complex and time consuming, for instance, when applying for permits or submissions.

As a consequence, during our study, we have made use of the Institutional Model as a descriptive instrument in order to be able to map Volvo Global Trucks’ purchasers’ environment, which is to be explored when examining potential sourcing markets. At present, the buyer lacks this type of standardized instrument. Important to mention is that this instrument does not only identify threats, but also potential opportunities within the societal framework in emerging markets.

Our study has identified many local opportunities in India. For instance, the fact that the Indian state of Karnataka is working in favour for its 1 tier suppliers have made the states’ supplier menu an attractive list of options to investigate for Volvo Global Trucks. Moreover, our research has proven that emerging markets have an outstanding cost benefit concerned with low labor costs.
6.3 Research Problem C

“Will the global sourcing process need to be changed, when being implemented for global suppliers in emerging markets?”

6.3.1 Changing GSP?
Our study has shown that the GSP does not have to change when being implemented in emerging markets. Evidently, there are always country specific factors that need to be considered when implementing new global suppliers. Cultural, political, operational and financial aspects always vary among markets, and particularly in the emerging ones. As a buyer, our findings suggest to consider these aspects in a supplier evaluation and implementation. However, these factors should not be regarded as barriers toward implementation, and do not mean that suppliers from emerging market need to have “their own” GSP. Nevertheless, the perception of these factors can explain the relatively low use of supplier in emerging markets for Volvo Global Trucks. It is the task of Volvo Global Trucks to minimize these perceived barriers within the organization, and increase the use of suppliers from emerging markets.

6.3.2 Moral Legitimacy
There are different types of legitimacy. However, in relation to GSP, we have found that the moral legitimacy aspect is the most relevant type to refer to.

Volvo Global Trucks

Moral legitimacy steams from Corporate Social Responsibility. Volvo Global Trucks can gain moral legitimacy in its direct linkages, in terms of its suppliers by creating job opportunities. However, Volvo Global Trucks has to acknowledge that it also indirectly, through its direct link to the Indian supplier base, contributes to the development of society. Examples of this would be the contribution to health and infrastructure in India. Additionally, Volvo Global Trucks influences, by their values and standards, labor groups and other societal groups.
Volvo Global Trucks has a societal as well as a financial perspective when making use of the Indian supplier base. Making use of the Indian supplier base cannot be done in a solely opportunistic way, although cost savings are of primary concern in the GSP.

6.4 Main Problem

*How can MNCs, operating in the automotive industry, improve the global sourcing process regarding suppliers in emerging markets?*

6.4.1 Contribution to MNC in Emerging Markets

Although our conclusions relate to the case of Volvo Global Trucks and focuses on internal organizational changes, some suggestions can be transferred to MNCs in general. We have identified that there exists a great potential in sourcing from India on a global scale. It is the task of the MNC to use these suppliers in an optimal way. Our study has identified several sources for cost savings that not only should be relevant in the case of Volvo Global Trucks. However, we have also learned that Volvo competitors make use of the emerging markets to a higher degree.

MNCs, operating in the automotive industry, can start by focus on simple products when sourcing from emerging markets. The emerging markets can easily meet the demands from the automotive industry in these segments. Labor-intensive segments that our study has identified are castings, forgings, sheet metal, rubber parts etc.

There can be an internal organizational resistance towards sourcing from emerging markets within an MNC. The perception that emerging markets mean poor quality, late deliveries etc. is according to our study not accurate. It is the task of the MNC to allocate the right amount of resources and create a deeper understanding regarding this mistaken perception.

In order for the automotive MNC to stay competitive, and keep up with globalization, there is a need to utilize the potentials that the suppliers in emerging markets incorporate. Due to favorable governmental policies, the
industry is facing an increasing competition and the emerging markets can be the competitive advantage that distances the MNC from its competitors.

Larger MNCs operating in the automotive industry can take the developmental role towards suppliers in emerging markets. However the smaller MNC can to a certain degree free ride on suppliers that already have been developed by competitors. It is important to consider if MNCs makes a strategic difference between taking a developmental or rationalized role in their supplier relationships. This will greatly impact on how they make use of its Global Sourcing Process and its suppliers from emerging markets.

Finally, MNCs in the automotive industry can gain moral legitimacy in both its direct and indirect linkages by taking the societal needs into consideration. Societal needs can be met directly and/or indirectly. The needs located in the direct linkages; for instance, involve creating job opportunities and quality of the work environment. In contrast, an MNC can meet the indirect societal needs by contribute to the society in form of enhanced infrastructure and increased health.
7. RECOMMENDATIONS

In this chapter the thesis will conclude with recommendations for Volvo Global Trucks. The chapter will start by identifying key success factors and finish with a practical instrument, the checklist, on how to reduce uncertainty and shorten the implementation of global suppliers in the Global Sourcing Process.

7.1 Key Success Factors
The analysis chapter has identified specific gaps in the implementation phase that in this chapter will be elaborated further into recommendations. It is in our belief that it is possible to turn these identified gaps into key success factors for Volvo Global Trucks in their use of the GSP.

7.1.1 Management Support
We argue that there exists organizational resistance towards sourcing from India by some parties in the Volvo Global Trucks internal organization. It is the task of the management to change this resistance. The management has not given increased sourcing activities towards India its full support in terms of resources in forms of training, skills, information etc. We accept as true that it is not only the issue of the management’s responsibility to be committed, but also to sell the concept to the remaining part of the organization so the organization works, and is aligned, in the same direction.

7.1.2 Willingness to Change Current Practices
Volvo is an organization that has existed for decades, with practices and procedures that are deeply rooted in the organization structure. A change in the supplier structure toward India, and remaining emerging markets calls for a change in current practices. Additionally, a change in the supplier base will probably mean that jobs will be lost in the western supplier base. We believe that Volvo Global Trucks must declare for the organization why an increase in supply from these markets is positive in the long run. The organization must understand and have the knowledge of why a change is made.
7.1.3 Willingness to Take Risks
We believe that some parties within the Volvo organization have the perception that sourcing from emerging markets is concerned with increased risk exposure. Increased supply from emerging markets has been argued to create problems in form of disturbance in the production of trucks, however this argument fails to communicate its meaning and reasoning.

Changes in a supplier base can cause problems, but it is not related to emerging markets. We have not found any confirmation that increased sourcing from India is going to create problems for Volvo Global Trucks. There may be specific factors that influence, and should be considered when implementing suppliers from India. However, it is the organization’s responsibility to come up with answers on how to reduce those specific factors. Changes within organizations are always related with possible problems. These risks have to be reduced as much as possible by implementing an instrument or tool that can identify potential threats.

7.1.4 Make Use of an Institutional Model
One alternative of how to identify risks in Volvo Global Trucks’ operational environment in emerging markets is to make use of the Institutional Model as a descriptive instrument. Buyers at Volvo Global Trucks are currently identifying factors from the model in an implementation of a supplier from emerging market. However, this is done in a more ad hoc basis and it is up to the buyer to decide how much should be analyzed. It is not done in a standardized way, and it is not spread to the different parties in an implementation. This can be one way to reduce the perception of risk regarding supply from emerging markets.

7.1.5 Eliminate Prejudices
Volvo Global Trucks has ingrained prejudices (in terms of poor quality, late deliveries etc) and has not convinced all parties in the organization about the potentials of emerging markets like India. There have for instance been previously bad experiences with parts sourced from India. Volvo Global Trucks must eliminate prejudices that change the perception of suppliers from
emerging markets. Creating “success stories” and transfer this knowledge within the organization can be one way to change the perception.

7.2 GSP and Consistency

It is vital that the model of global sourcing is transferred correctly into practice. It is our belief that the process is used differently among buyers within the Volvo Global Trucks organization. This lack of consistency in using the GSP can be transferred to the uncertainty that exists among buyers to implement suppliers from emerging markets.

Additionally, from an organization point of view, an increased consistency will reduce uncertainty. As a result, we strongly believe that there is a need for an instrument, enhancing the confidence and commitment in the organization. Moreover, such an instrument has to offer consistency for the buyer, and allow him to overcome information needed to support the decision so he can implement a supplier in a convinced manner. Such an instrument could be in form of a checklist (See Appendix 3), in which a buyer makes sure to check all necessary aspects before the actual implementation takes place in practice.

7.2.1 The Checklist

The checklist is based on the assumption that the buyer can work much more effectively if he, in collaboration with the concerned parties, works with transmitting a mutual representation of Volvo Global Trucks towards the supplier - a joint picture rather than that each Department is retrieving its own perception of the situation (see figure 7.1). In other words, instead of, e.g., the Logistics Department gets assigned to verify the situation from a logistics point of view; all Departments should create a universal perception of the conditions before even start the implementation. In such a manner, the Departments can together at an early stage determine what is lacking in order to proceed, and in that way not waste company resources.

We believe that consistency is one of the keywords in the GSP, especially in the implementation phase. As a response, we have come up with a checklist for the buyer, which not only will increase his confidence and commitment in the implementation phase, but also generate a logical step-wise process that is easy
to tag along. Moreover, in order to integrate the sub-processes in the implementation, we believe that it is important to establish a process-cycle involving all concerned parties, rather than individual check ups from each Department.

As a buyer has reached the implementation phase of a global supplier it is vital that he/she follows standardized procedures. Not only will this generate consistency for himself, but also for the other Departments, and they can in that way easier follow the case process. Moreover, uniformity will generate concrete steps of how to conduct the implementation, but also contribute to an easier way to store results and thereby also analyze and get an overview of where improvement in the implementation can be made.

We strongly believe that solely relying on a checklist is not enough. It is in our belief that in order to obtain trust and confirmation upon taking a decision, the case which is processed needs to be backed up by concerned Departments. In addition, we have come up with a suggested process flow on how the checklist should be processed throughout the concerned parties.

7.2.2 Process-cycle
In figure 7.1, one can see what the proposed checklist flow might look like. There we can witness that all the Departments join forces towards the supplier. This will add a confident perception of Volvo Global Trucks in the eyes of the supplier.

We have chosen to divide the process into two segments – production related activities and organizational related activities. The production related activities (PRA) involve Design and Quality, while organizational related activities (ORA) more concern logistics and administrative activities.

As illustrated in the model, the buyer initiates and distributes the two checklists, one along the PRA-route (Design and Quality) and one via the ORA-route (Logistics and Local units). One can say that the buyer outsources the fields of the checklist that he does not have expertise in. When Design receives the checklist they verify the blueprint and other technical required
specifications and pass it on to the Quality Department. In this respect, Quality is now automatically drawn in into the implementation process and knows exactly what is conducted earlier. Additionally, it will enable to clearly see where in the implementation phase the case is situated. Moreover, the interaction between Design and Quality is of high value and will generate exchange of ideas, in form of improvement etc. Furthermore, this is also an exceptional way of summing up all activities that are done up to this date in the GSP, and update concerned parties about the case and in what phase the implementation is located.

Figure 7.1 - Checklist Process Flow

After that the checklist has passed, and been filled out by PRA, they will pass the checklist back to the buyer. At this time the buyer also will receive the other checklist from the ORA-route, which has been reviewed and filled out by all concerned parties along that route. As the buyer receives the two checklists he calls for a meeting where all the concerned parties (design, quality, logistics and possible local units) will meet to discuss the checklists and exchange ideas. As shown in the model, to the meeting the buyer is expected to contribute with his part of the checklist (See Appendix 3), and will thereby be able to sum up everything to complete a fully comprehensive checklist.
After have completed the checklist, the buyer will in agreement with the concerned Departments be able to launch the implementation in a more confident manner, since his checklist has been backed up Departments responsible for their specific tasks.
AREAS FOR FUTURE RESEARCH
8. AREAS FOR FUTURE RESEARCH

Our thesis has involved how MNCs, operating in the automotive industry, can improve the global sourcing process regarding suppliers in emerging markets. The thesis has been structured around the main problem and its research problems, describing Volvo Global Trucks’ Global Sourcing Process, emerging markets’ impact on it, and if the process needs to be changed when implementing a supplier in these markets.

We believe that the logistical aspect when sourcing from emerging markets could be more extensively analyzed. Logistical aspects have been shown to be one of the most commonly used explanations of why the supply ratio from emerging markets is so low. An in-depth analysis regarding this aspect would become a useful device for Volvo Global Trucks.

Finally, the corporate social responsibility and legitimacy discussion that we presented in our thesis could be further discussed concerning emerging markets. “What is the value of establishing legitimacy for an MNC operating in emerging markets?” How should this value be balanced with the company’s financial targets?
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REFERENCES

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In order to further describe Volvo Global Trucks Global Sourcing Process, Appendix A shows in a more detailed ways the different parts in the process. We chose not to make this extensive description of the process in the thesis, due to the fact that it’s consisted of many branch specific terms.

### 1. Process initiation

**Process**
- Define Activity
- Evaluate Requirements
- Evaluate Resource Requirements
- Evaluate Responsibilities

**Responsible**
- Responsible buyer (Primary Buyer)

**Input**
- Strategies
- Time
- Objectives
- Project Scope
- Pre-investigation on Running Parts

**Output**
- Conditional Commitment based on input and resources allocation
2. Early Specification & Target Cost

Process
- Cross functional
- Project Description
- Translate Objectives to Specifications (functional requirements)
- Identify low cost country suppliers
- Establish Target Cost (Running parts)
- Approved Target Cost (Running parts)

Responsible
- Project Manager Purchasing
- Responsible Buyer and/or responsible Purchasing Manager

Input
- Project Objectives (product-/starting costs)
- Special conditions
- Local Content Requirements
- Global Project Quantities
- Project Scope
- Commonality
- Part information from Purchasing Systems (Running parts)
- Global quantities (Running parts)

Output
- Documentation for RFQ
- Target Cost at the same level as documentation
3. Evaluation of Potential Global Suppliers

Process
- Evaluation of Potential Suppliers
  - Responsible Buyer
  - Supported by Site Buyers
  - Quality
  - Logistics

Input
- Information from Strategy
- Global Supplier Evaluation Model
- Global Supply Chain Process
- Suggestion on Potential Suppliers from Local Buyers

Output
- Potential Supplier List for Approval in GSC 1 and for RFQ
4. Request For Quotation and Supplier Feedback

Process
- Create RFQ
- Send to Local Buyer when Applicable
- Provide Additional Information to all Suppliers
- Dialogue with Suppliers

Responsible
- Responsible Buyer
- Supported by Site Buyers

Input
- Complete Document for RFQ
- Commercial Conditions
- Suppliers List for RFQ
- Global Sourcing Committee Approval
- Local Content Restrictions
- Low Cost Country Supplier

Output
- Detailed quotation (weight, material etc.)
- Supplier feasibility study
5. Evaluation Step

Process
- Evaluation of quotations and supplier feedback with regard to:
  - Sourcing status report
  - Matching quotations/requirements
  - Secure capacity
  - Alternative specification proposals
  - Calculation of landing cost

Responsible
- Responsible buyer, supported by local supplier

Input
- Detailed quotations
- Supplier feasibility study
- Logistic requirements
- Information from Engineering, Quality, and Logistic

Output
- Selection of suppliers for initial negotiation
- Request for new quotations when applicable
6. Negotiation

Process
- Initial negotiation with "finalists"
- Addressing all aspects

Responsible
- Responsible buyer

Input
- Selection of suppliers for negotiation
- Specification changes
- Targets

Output
- New quotations
- Request for specific changes
7. Create Pre Proposal

Process
- Evaluate the best quotations from Sourcing Status Report (Case summary) and recommend a supplier based on lowest landed cost for Volvo Global Trucks

Responsible
- Responsible Buyer in agreement with Site Buyers

Input
- New quotation including deviations from requirements
- Special Market Requirements
- Final results from SEM for proposed suppliers
- Approval from Engineering, Quality, Logistics and PM-Purchasing

Output
- Sourcing Status Report (case summary) with recommended supplier for presenting in Global Sourcing Committee
### 8. Final Negotiation

**Process – final negotiation with “finalists”**

- Addressing all aspects
- Landed cost
- Specification
- Capacity
- Lead-time
- After market and other Conditions

**Responsible**

- Responsible Buyer

**Input**

- Input
- GSC comments

**Output**

- Final agreement with supplier
- Conditional agreement
- No agreement
## APPENDIX 2: Potential Supplier List

<table>
<thead>
<tr>
<th>Indian supplier</th>
<th>Product/Part</th>
<th>SEM</th>
<th>% Saving</th>
<th>Saving SEK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sundram Fasteners Ltd.</td>
<td>Wheel Nut B/54</td>
<td></td>
<td>6.93%</td>
<td>698,709</td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Bracket Towing B/51</td>
<td></td>
<td>54.90%</td>
<td>369,490</td>
</tr>
<tr>
<td>Kores India</td>
<td>Bracket Chamber B/51</td>
<td></td>
<td>54.06%</td>
<td>920,298</td>
</tr>
<tr>
<td>Stumpp</td>
<td>Compression Spring B/61</td>
<td></td>
<td>26.72%</td>
<td>136,323</td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Brace B/51</td>
<td></td>
<td>26.17%</td>
<td>54,886</td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Reinforcing Plate B/51</td>
<td></td>
<td>14.55%</td>
<td>15,884</td>
</tr>
<tr>
<td>Karnataka</td>
<td>Manifold B/54</td>
<td></td>
<td>14.44%</td>
<td>327,976</td>
</tr>
<tr>
<td>Kores India</td>
<td>Towing Brace B/51</td>
<td></td>
<td>44.42%</td>
<td>1,249,031</td>
</tr>
<tr>
<td>Indoshell</td>
<td>Bump Stop B/61</td>
<td></td>
<td>32.81%</td>
<td>574,582</td>
</tr>
<tr>
<td>Indoshell</td>
<td>Spring Shackle B/61</td>
<td></td>
<td>31.81%</td>
<td>3,862,075</td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Support Assy B/51</td>
<td></td>
<td>16.41%</td>
<td>56,437</td>
</tr>
<tr>
<td>Ghatge Patil</td>
<td>Frt Spring Anch B/74</td>
<td></td>
<td>13.94%</td>
<td>558,631</td>
</tr>
<tr>
<td>Ghatge Patil</td>
<td>Frnt Spring Anchorage B/74</td>
<td></td>
<td>13.94%</td>
<td>558,631</td>
</tr>
<tr>
<td>Ghatge Patil</td>
<td>Bogie Anchorage Assy B/74</td>
<td></td>
<td>7.06%</td>
<td>528,352</td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Bracket B/51</td>
<td></td>
<td>4.00%</td>
<td>12,136</td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Bracket Bump Stop B/51</td>
<td></td>
<td>33.40%</td>
<td>114,204</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Indian supplier</th>
<th>Product/Part</th>
<th>SEM</th>
<th>% Saving</th>
<th>Saving SEK</th>
</tr>
</thead>
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<tr>
<td>Karnataka</td>
<td>Manifold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Anchorage</td>
<td>17 643</td>
<td>5,88%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intermediate Pipe</td>
<td>22 711</td>
<td>29,87%</td>
<td></td>
</tr>
<tr>
<td>Ghatge Patil</td>
<td>Cradle</td>
<td>1 032 948</td>
<td>32,73%</td>
<td></td>
</tr>
<tr>
<td>Kores India</td>
<td>Anch Stabilazer</td>
<td>242 977</td>
<td>82,19%</td>
<td></td>
</tr>
<tr>
<td>Stumpp</td>
<td>Compression Spring</td>
<td>16 269</td>
<td>4,11%</td>
<td></td>
</tr>
<tr>
<td>JBM tools</td>
<td>Support</td>
<td>14 909</td>
<td>14,25%</td>
<td></td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Bracket Rear Foot Step</td>
<td>740 732</td>
<td>51,93%</td>
<td></td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Bracket Rear Foot Step</td>
<td>730 589</td>
<td>51,43%</td>
<td></td>
</tr>
<tr>
<td>JBM tools</td>
<td>Bracket</td>
<td>24</td>
<td>0,01%</td>
<td></td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Strap, assy</td>
<td>260 484</td>
<td>42,68%</td>
<td></td>
</tr>
<tr>
<td>G.S Auto</td>
<td>U Bolt</td>
<td>45 075</td>
<td>30,95%</td>
<td></td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Bracket Air</td>
<td>114 289</td>
<td>25,71%</td>
<td></td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Bracket Charge Pipe</td>
<td>35 903</td>
<td>36,49%</td>
<td></td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Bracket, Condensor</td>
<td>215 818</td>
<td>50,30%</td>
<td></td>
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<tr>
<td>Silicon Valley</td>
<td>Bracket, Connector Pipe</td>
<td>723 788</td>
<td>49,03%</td>
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</tr>
<tr>
<td>JBM tools</td>
<td>Plate, assy</td>
<td>88 260</td>
<td>23,17%</td>
<td></td>
</tr>
<tr>
<td>JBM tools</td>
<td>Attaching Plate</td>
<td>162 079</td>
<td>85,37%</td>
<td></td>
</tr>
<tr>
<td>JBM tools</td>
<td>Mud Stay</td>
<td>397 119</td>
<td>73,99%</td>
<td></td>
</tr>
<tr>
<td>Indian supplier</td>
<td>Product/Part</td>
<td>SEM</td>
<td>% Saving</td>
<td>Saving SEK</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------</td>
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<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>JBM tools</td>
<td>Mud Stay B/58</td>
<td></td>
<td>73.99%</td>
<td>361 645</td>
</tr>
<tr>
<td>JBM tools</td>
<td>Mud Stay B/58</td>
<td></td>
<td>73.67%</td>
<td>392 610</td>
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<tr>
<td>JBM tools</td>
<td>Bracket, Main Switch B/58</td>
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<td>61.60%</td>
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<td>T-Bracket B/51</td>
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<td>1 084</td>
</tr>
<tr>
<td>Silicon Valley</td>
<td>Stay, Assy B/51</td>
<td></td>
<td>42.93%</td>
<td>782 309</td>
</tr>
<tr>
<td>Kores India</td>
<td>Anchorage U Bolt B/51</td>
<td></td>
<td>65.37%</td>
<td>368 595</td>
</tr>
<tr>
<td>Kores India</td>
<td>Spacer B/51</td>
<td></td>
<td>75.20%</td>
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<td>Bracket Relay Arm B/51</td>
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<td>75.61%</td>
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<td>543 439</td>
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<td>29.08%</td>
<td>31 337</td>
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<td>-3.54%</td>
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<td>Exhaust Pipe,Horizontal B/52</td>
<td></td>
<td>-9.02%</td>
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</tr>
<tr>
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<td></td>
<td>-23.87%</td>
<td>0</td>
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<td>-2.00%</td>
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<td>-12.74%</td>
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<tr>
<td>Product/Part</td>
<td>SEM</td>
<td>% Saving</td>
<td>Saving SEK</td>
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<tr>
<td>-------------------</td>
<td>-----</td>
<td>----------</td>
<td>------------</td>
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<tr>
<td>JBM Tools-Pune</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Exhaust Pipe</td>
<td>B/52</td>
<td>-24,40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silencer</td>
<td>B/52</td>
<td>-23,87%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bracket Charge Air Pipe</td>
<td>B/52</td>
<td>-21,43%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat Shield</td>
<td>B/52</td>
<td>-24,03%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaust Pipe</td>
<td>B/52</td>
<td>-45,99%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jai Parabolic Springs Ltd.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaf spring, Front</td>
<td>B/64</td>
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<td>Leaf spring, Rear</td>
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<td>31,88%</td>
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<td>Leaf spring, Rear</td>
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<td>Stumpp</td>
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<td>Compression spring</td>
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<tr>
<td>Rear spring Anchorage</td>
<td>B/74</td>
<td>35,77%</td>
<td>940 428</td>
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<tr>
<td>Front Spring Bracket</td>
<td>B/74</td>
<td>57,54%</td>
<td>1 332 680</td>
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<tr>
<td>Front Spring Anchorage</td>
<td>B/74</td>
<td>15,77%</td>
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<td>Brakes India Ltd.</td>
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<td>Bracket, V Stay</td>
<td>A</td>
<td>51,50%</td>
<td>1 724 587</td>
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<td>Anchorage, Hydraulic Cy</td>
<td>B/51</td>
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<td>Ghatge Patil</td>
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<td>Anchorage Steering Box</td>
<td>B/74</td>
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<td>Lakshmi Precision Screws</td>
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<td>Press Screw M8*60</td>
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<tr>
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<td>% Saving</td>
<td>Saving SEK</td>
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<td>8,85%</td>
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<td>Sundram Fasteners Ltd.</td>
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<td>16,20%</td>
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<td>Sundram Fasteners Ltd.</td>
<td>Nut, M24x29 B/71</td>
<td>21,51%</td>
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<td>Sundram Fasteners Ltd.</td>
<td>Hexagon Nut, M20*24 B/71</td>
<td>48,84%</td>
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<td>Sundram Fasteners Ltd.</td>
<td>Flange Nut M18<em>1,5</em>20 B/71</td>
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<td>G.S Auto</td>
<td>U-Bolt, M20*140 B/58</td>
<td>57,95%</td>
<td>195 517</td>
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<td>G.S Auto</td>
<td>U-Bolt</td>
<td>35,51%</td>
<td>56 343</td>
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<td>G.S Auto</td>
<td>U-Bolt M24<em>91</em>375 B/58</td>
<td>29,08%</td>
<td>126 540</td>
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<td>G.S Auto</td>
<td>Stud</td>
<td>24,11%</td>
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<td>G.S Auto</td>
<td>Stud M12*75 B/58</td>
<td>30,76%</td>
<td>163 217</td>
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<td>G.S Auto</td>
<td>Stud M10*90 B/58</td>
<td>63,89%</td>
<td>117 289</td>
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<td>G.S Auto</td>
<td>U-Bolt M20*260 B/58</td>
<td>38,71%</td>
<td>34 435</td>
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<td>G.S Auto</td>
<td>Stud</td>
<td>63,66%</td>
<td>830 549</td>
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<tr>
<td>G.S Auto</td>
<td>Stud M8*40 B/58</td>
<td>46,56%</td>
<td>5 741</td>
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</table>

TOTAL SAVING: 30 196 779
# APPENDIX 3. The Checklist

<table>
<thead>
<tr>
<th>Name:</th>
<th>Verification date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Department:</td>
</tr>
<tr>
<td>Supplier:</td>
<td>Product:</td>
</tr>
</tbody>
</table>

**Buyer:**

- Verify supplier registration *(PARMA)*
- Verify supplier partnership attitude
- Verify supplier’s willingness to improve processes and routines
- Verify Volvo’s amount of supplier’s total production (<25-30%)
- Verify critical operations that needs to be focused on in the near future
- Verify to what industries supplier produce to

**Fulfill PQP requirements**

Verify if machinery is leased or not

*(Easier to cope with changes in design and policies if machinery is leased)*

**Identify supplier relationship to automotive industry**

- Supplier linkage to competitors
- Verify if there is an ability to free-ride on competitors
Communication:
- English speaking
  - Logistics
  - Quality
  - Design
- Established primary supplier contact
- EDI communication 98

Verify Safety:
- Sprinkler system
- Ventilation
- Safety regulations (gloves, masks etc)
- Fire exits
- Fire extinguisher
- Lights and markings on floor

Production & Engineering:
- Verify in-house production
- Verify potential bottleneck in production
- Verify reliability of power source
  (Local source, reliability, power cuts etc)

Cost:
- Fulfill Volvo’s payment conditions
- Fulfill Volvo’s cost demands
- Take responsibility for warranty cost 99

98 EDI (Electronic Data Interchange) works by providing a collection of standard message formats and element dictionary in a simple way for businesses to exchange data via any electronic messaging service.

99 Warranty: A guarantee by a seller to a buyer that if a product requires repair or remedy of a problem within a certain period after its purchase, the seller will repair the problem at no cost to the buyer.
- Appendix -

- Verify continuous quality & productivity improvements

Environment:
- ISO 14000
- No chemicals from Black List (cleaning equipment etc)
- Sufficient light in facility
- Air-condition exists or not
- Comply with environment product requirements
  - Humidity
  - Temperature
  - Ventilation
  - Clean and good order in plant

SEM:
- Verify who is responsible for SEM audit
- Approval date
- Acceptable SEM score
- Identify weakest spots in SEM (potential to improve?)

At Volvo HQ, informed and identified responsible individual concerning:
- Logistics
- Quality
- Design
- Local (if applicable)

Supplier Employees:
- Acceptable transit time to work
- Provide in-house training for employees

Verify other suppliers in area:
- Cluster effect
- Potential technology transfer in between suppliers
Logistics:

- Verify delivery precision 100%
- Verify EDI communication
- Verify approved packaging (cooperation with packaging expert)
- Verify local Storage
  
  *(Humidity, temperature, differences between different products, local responsibility)*

- Verify inbound logistic flow
  
  *(Responsible for local logistics, verify logistical blocks e.g. customs, bureaucracy, infrastructure)*

- Responsible of handling of incoming goods
- Verify outbound logistic flow
  
  *(Responsible for outbound logistic, any specific demands from hub etc)*

- Verify assessment need of safety stock
  
  *(Depending on reliability of logistical flow, examine reliability according to Institutional analysis)*
Verify Quality:
- Verify ISO9000 approved
- Verify QS9000
- Verify TQM philosophy
- Verify Zero fault attitude
- Verify Production Test Run
- Verify ability to solve and prevent field problem
- Verify PPM agreement and compliance
- Verify that critical quality parameters are automatic and not manual

(Some quality parameters cannot be done by physical labor)