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Improving the Competitive Position of a Small Supplier with regard to Large OEMs

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Preface

Finally a long journey is coming to an end. The journey has taken me into many new and

exciting places and moments. There has been joy and sometimes even despair. I have

meet a whole class of enthusiastic, creative and supportive people who have helped me

to reach this final page of my Thesis.

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This Thesis aims to create a proposal to enable improving of the case company's competitive position with regard to large OEMs in Finland. The large OEM companies in Finland are currently present worldwide having projects in different countries and cultures. Presently, B2B activity with the large OEM companies in the Finnish industrial field requires capabilities to support the OEM's business activities. The smaller the supplier is, the more it has to rely on partnerships, and the more it has to be able to utilize its competitive advantages efficiently.

The objective of this thesis is to build a proposal to partner with large OEM companies so that to enlarge the business activities of a small company. The selected research approach for the thesis is a qualitative case study because it is the most suitable approach for understanding the strength and weaknesses of the case company, identifying the missing products and services required for a partnership, and providing a solution for engaging in business activity with the large OEM. The study started with a current state analyses of the case company. The identified strengths of the case company from the CSA section and the conceptual framework are used for co-creating the first proposal. The first proposal is then validated and improved as the final proposal for improving the competitive position of the case company.

The outcome is a proposal that made suggestions how to improve the case company position by using servitization, networking and using existing customer references in the field where there are few existing. The final proposal includes best practice identified in the conceptual framework of the study, the existing strengths of the case company and the personal opinion of the case company local representative. The proposal created in this study proposes steps for the case company how to expand it is operations and offerings to match the requirements set by the large OEM customers.

Keywords	OEM customer, system integrator, component supplier, industrial network, competitive position, business requirement



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1 Introduction

This Thesis aims to create a proposal to enable improving of the case company's competitive position with regard to large OEMs in Finland. The large OEM companies in Finland are currently present worldwide having projects in different countries and cultures. Present day B2B activity with the large OEM companies in the Finnish industrial field requires capabilities to support the OEM's business activities. The smaller the supplier is, the more it has to rely on partnerships, and the more it has to be able to utilize its competitive advantages efficiently. This is challenging for small suppliers because the competitors are typically larger companies with a wide base of resources.

The aim of the thesis is thus to create a proposal so that to partner with large OEM companies and thus to enlarge the business activities of a small company.

The necessity for the proposal comes from the lack of resources to comply with the requirements of the large OEMs in Finland. For the last few years, the case company has been trying to start business activity with the large OEMs in the Finnish industrial sector. The heavy requirements from the OEMs side, however, have been close to impossible to fulfil by a small player and therefore the case company current operations and offerings need to be improved and also a strategic partnership with a right partner in order to fulfill the requirements need to be studied.

1.1 Key Concepts

In order to understand the problem at hand, several key concepts must be explained.

Original Equipment Manufacturer (OEM) means a company involved in Industrial designing, manufacturing, testing and packaging of equipment.

A large OEM, in the context of this study, means a large company designing and manufacturing industrial products. As a pilot OEM company this thesis means, for example, Paper Machines in Finland as Valmet Technologies in Jyväskylä.

System Integrator is a significant partner between the component supplier and a large OEM company. In the content of this study, a system integrator can mean, for example, a company that assembles together hydraulic pumps and electric motors, oil reservoir, hydraulic valves and other industrial components together thus providing complete hydraulic power units and/or systems for industrial manufacturers using hydraulics as part of machine construction.

Component supplier is a company that provides only separate parts of system.

Mobile sector, in the context of this study, means an industrial sector that deals with moving machinery.

Industrial sector, in the context of this study, means an industrial sector that deals with stationary machinery.

1.2 Case Company

The case company of this thesis is a small company operating in Finland. The company was founded in November 2009. The company's sales representative represents the products coming from two Italian Hydraulic Manufacturers. The sales responsibility area is the whole Finland. The case company offers components and if needed complete hydraulic systems manufactured in Italy. The main customers are working in mobile (moving machinery) and industrial sectors (stationary machinery) with hydraulic equipment as part of their machine construction. Examples of customers in these sectors are Valmet Technologies and Bronto Skylift. As the OEM customers typically require complete systems, they are not too willing to purchase straight from the component supplier such as the case company. In order to fulfill the OEM requirement, a partnership with Hydraulic System integrators is often necessary. Thus, System integrators are also a target customer for the case company.

The case company is working in co-operation with its global Italian partners. The Italian partners are locally present in the main market sectors around the world in 20 countries. In addition they have service partners in 45 countries. In Finland the Italian partners have also two local dealers working in co-operation with the case company.

1.3 Business Challenge

The case company is a small company with limited resources. The resources are adequate for engaging in business activity with the small and medium OEMs in Finland. The large OEM, however, require turnkey solutions delivered to any part of the world, including delivery, assembly and commissioning of hydraulic solutions, technical training, service and after sales offerings globally.

Presently, part of these requirements can be met with the help of the current Italian partners. But the day-to-day business activity in Finland requires additional resources from the local partners. These resources are available from the local system integrators with whom the case company is working with. The case company offers the components used in the hydraulic systems and the system integrator offer their help with integrated systems for the case company.

As a result, at the moment, the case company seeks to re-think its operations and resources in order to improve its competitive position, and become able to strike partnerships with large OEMs.

1.4 Objective and Outcome

The case company is mainly a component supplier for the Finnish industrial manufacturers. This is enough to fulfil the requirements of small and medium OEM in Finland. But the large OEM require complete systems delivered to them, including delivery, assembly and commissioning of hydraulic solutions, technical training, service and after sales offerings globally. In order to fulfil these requirements set by large OEMs, the case company will need to improve its competitive position by re-thinking the offering, operations, networking, references and other relevant but missing business elements to enable partnership with large OEMs.

The objective of this thesis is, therefore, to improve the competitive position of a small supplier with regard to large OEMs.

The research question for this thesis can be formulated as follows:

What means should the case company use in order to become a more attractive business partner to large OEMs?

In other words, what kind of means are needed to be able to improve the competitive position and attractiveness of the case company, so that to become an accepted supplier of the large OEMs, such as Valmet.

The outcome of this Thesis is to suggest improvements for the case company's competitive position by, first, by analysing the large OEM customer needs; second, through identifying and improving the case company strengths and weaknesses, and third, by identifying a right strategic partner to complete the range of services and offerings towards large OEMs. The final stage includes testing the improved competitive position in practise.

This Thesis is written in 7 sections. The first section is the introduction to the Thesis. The second section describes the research methods. Section 3 includes the current state analysis. Section 4 presents the best practice in the field. Section 5 presents the first proposal. Section 6 discusses the validation process. And section 7 presents the discussions and conclusions of this thesis.

2 Research Method and Material

This section describes the research approach, research design, data collection and analyses and validity and reliability plan.

2.1 Research Approach

The selected research approach for this thesis is a case study. The case study is defined as "an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin 2003: 13). Another case study definition by Gerring (2004) follows four steps, (1) a qualitative method for the research is selected, (2) the research follows defined guidelines which are clinical, ethnographical, using observation of the participants or instead "in the field", (3) the research is following predefined processes that can be traced, (4) the study focuses on a single event (Gerring 2004: 341-342).

The fundamental feature of a case study approach is that it always "relies on multiple sources of evidence, with data needed to converge in a triangulating fashion" (Yin 2003: 14). By using multiple sources of evidence, both qualitative and quantitative data can be used together. Also Eisenhardt (2007) explains that "case studies can accommodate a rich variety of data sources, including interviews, archival data, survey data, ethnographies and observations". As the research moves away from studying the everyday phenomena towards more strategic phenomena, the interviews often become the primary data source for a case study (Eisenhardt 2007: 25-32).

In this thesis, the case study is the most suitable approach for understanding the strength and weaknesses of the case company, identifying the missing products and services required for a partnership, and providing a solution for engaging in business activity with the large OEM.

2.2 Research Design

The research design used in this study is shown in Figure 1 below.

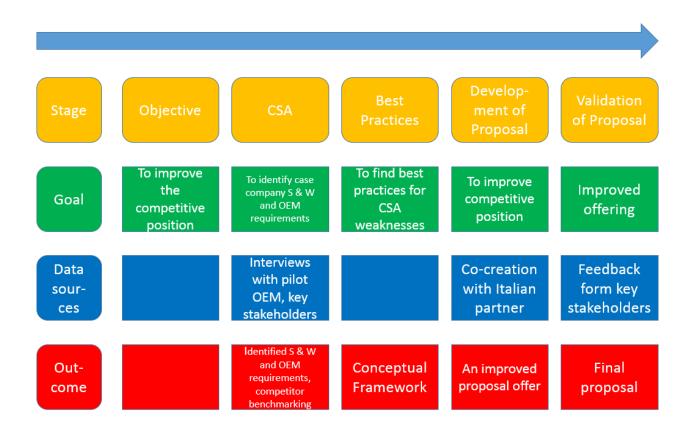


Figure 1. Research Design in this study.

The research design starts with defining the problem and focus of the study. The research problem comes from dealing with a real life problem of launching business with large OEMs. The problem than points to the objective and outcome of this thesis. The second step in the research design is the current state analyses (CSA, based on Data1) which defines: (a) the case company strengths and weaknesses (through customer interviews, benchmarks main competitor), and (b) defines the large OEMs requirements for partnership, thus identifying the gap between the requirements from the large OEM and the current resources available in the case company.

The CSA stage is followed by the review of available knowledge and best practice which identifies the best practice for improving competitive position available in

the literature. The literature focuses on building operating models for partner-ships, supplier and customer relationship and strengthening the supplier position towards the customer. Key relevant findings from literature form the conceptual framework. By combining the challenge areas identified from CSA (data1) with the ideas from available knowledge, the conceptual is developed framework for building the improvement proposal. This first proposal aims to fulfil the large OEMs requirements. The first proposal is built with representatives of the Italian partner company (Data 2) and the results formulate the final proposal. The final proposal is than evaluated with the large OEM (Data3).

2.3 Data Collection and Data Analysis Methods

The research strategy used for this thesis is to use qualitative data. The data for this study has been collected from several different sources in order to make sure that collected data is valid and reliable. The main data has been acquired through interviews. As discussed in research literature, interviews provide numerous advantages for the case study because they are insightful and allow direct access to case (Yin, 1994, 80).

For this thesis, the data was collected in three rounds, Data 1-3. The data for the current state analyses (Data 1) will come from the field interviews and by benchmarking the main competitor in the field and from the case company own observations. In this study, the interviews were held as semi-structured and were recorded by the researcher. In addition to the interviews, competitor benchmarking was done and a pilot company was interviewed (large OEM) and documentation studied.

Data 1 for the current state analysis is collected from four different sources. First, the data for the case company strengths and weaknesses is collected from interviews with the case company key customers. Second, the data for OEM requirements is collected from the pilot OEM company key stakeholder interviews. To identify the pilot OEM company key requirements, two detailed interviews were held with the key stakeholders of the company. One interview related to the commercial perspective of the business and the other interview related to the technical perspective of the business. Also based on the pilot OEM company interview

results which are showing the OEM requirements. Third, to collect data for competitor benchmarking, the questionnaire for competitor benchmarking was used. The competitor benchmarking was also extended through several interviews with the customers working with both, the case company as well as the main competitor in the market. Finally, the data for the analysis of the case company offering and operations was collection from the participant observation by the researcher collected through five years of contacts with the selected pilot OEM company.

The sources of data used in the study are shown in Table 1 below.

Table 1. Types of data.

Data	Content	Data source	Data Type	Purpose of Analy- sis
Data 1 Current State Analy- ses	Identi- fying key chal- lenges	Case Company observations	Meeting notes, personal feel- ings from the customer meet- ings	These observations have been used to back up the information from interviews.
		key stake- holders, exter- nal consultant	Interviews, Main competitor benchmarking	These interviews identify the requirements set by the pilot company (large OEM), they also help to position the case company in the market and reveal the S/W of the case company
		Pilot company (large OEM) Company documents	Supplier requirements, company working policies	These documents set the standard require- ments for the supplier evaluation
Data 2 Building the proposal	Building up the model	Italian partner	Interview	This meeting forms the model to be used to access large OEM customers
Data 3 Evaluation of the Final Proposal	Valida- ting the Final proposal	key stake- holders of the pilot company	Interview	This meeting evaluates the final model to be used to access large OEM customers

Table 1 shows the description of data collections and analysis methods by each type of data.

As seen from Table 1, the data used for proposal building (Data 2) includes the feedback information from the meeting with the case company Italian partner. The data used for validation and testing the proposal (Data 3) includes the final evaluation information from the meeting with the large OEM company management.

Each type of data used in this study is described separately below.

Interviews

Interviews served as the primary data source for this study and were held from March to May of 2016. The interviews were done in one-to-one meetings. The interviews were use, first, to identify the strengths and weaknesses of the case company, second, to analyse the large OEM requirements, and third, to benchmark the case company against the market leader. The details of interviews are shown in Table 2 below.

Table 2. Details of interviews and discussions.

	Data type	Participants / role	Content	Date and Length	Docu- mented as
	Data 1				
1	Face to face	Respondent 1:	Interview about main com-	March	
1	Interview	Sales Area Manager 1, Italian partner	petitor benchmarking	2016 1 hour	Field notes
	Face to face	Respondent 2:	Requirements for partner-	March	Field a stee
2	2 Interview	Procurement Man- ager, pilot company	ship from financial per- spective	2016 2 hours	Field notes
	Face-to-face Interview	Respondent 3:	Requirements for partner- ship from technical per- spective	March 2016 2 hours	Field notes
13 1		Product development Manager, pilot com- pany			
4	Telephone In-	Respondent 4:	Requirements for partner- ship from technical per- spective April	April	Field notes
4	terview	Designer, ex-pilot company	Interview about main competitor benchmarking and case company S/W	1 hour	Tield flotes
5	Face-to-face	Respondent 5:	Interview about main competitor benchmarking and	April 2016	Field notes
	Interview	External consultant / Developer	case company S/W	1 hour	13.0.10.30

6	Face-to-face Interview	Respondent 6: The case company key customer, Managing Director	Interview about main competitor benchmarking and case company S/W	April 2016 1,2 hour	Field notes
7	Face-to-face Interview	Respondent 7: The case company key customer, Chief Design Manager	Interview about main competitor benchmarking and case company S/W	April 2016 1 hour	Field notes
8	Face-to-face Interview	Respondent 8: The case company key customer, Technical Manager	Interview about main competitor benchmarking and case company S/W	April 2016 1 hour	Field notes
	Data 2				
9	Face-to-face Interviews	Respondent 9: Sales Area Manager 1, Italian partner	Proposal building	May 2016 4 hours	Field notes
	Data 3				
10	Face-to-face Interviews	Respondent 10 & 11: Sales Area Manager 2, Italian partner Sales Area Manager 3, Italian partner	Validation	June 2016 2+2 hours	Field notes

As shown in Table 2 above, eight interviews were conducted and analyzed for Data 1. Two interviews with the pilot OEM company key stakeholders in order to identify the key requirements set for the possible co-operation. One interview with the Italian partner for the main competitor benchmarking and for the identification of the case company strength and weaknesses. And five interviews with the case company key customers working with both the case company as well as the preferred supplier of the pilot OEM company in order to benchmark the case company against the main competitor which is the preferred supplier of the pilot OEM company and to identify the case company strength and weaknesses. For Data 2, two interviews were held with the Italian partner in order to build a proposal for the pilot OEM company. The building of the proposal was co-created with the Italian partner because of their possession of the vast knowledge and experience of supplying large OEM customer globally. For Data 3, two interviews were held with another two Italian partners in order to validate the proposal.

A list of questions related to the requirements of the pilot OEM company can be found in Appendix 1.

Pilot OEM Company documentation

In order to understand the pilot OEM company ways of working, the related documentation was studied to understand the internal guidelines for doing business with suppliers. The documents were use in addition to the interviews with the representations of the pilot OEM company and serves as supportive materials.

The details of the documentation are shown in Table 3 below.

Table 3. Internal documentation of the pilot OEM company.

		Number of	
	Name of the document	Pages	Document description
1	Code of Conduct	24 pages	Set of rules defining the company moral and ethics, responsibilities and proper practices
2	Health, Safety and Envi- ronment Policy	1 page	Guidelines for following the HSE elements
3	Sustainable supply chain policy	3 pages	Sustainability policy for the company

As shown in Table 3 above, the documentation includes the company internal guidelines for working with suppliers.

Benchmarks

Benchmarking the main competitor in the field was based on the findings from the key requirements analysis conducted with the key stakeholders of the pilot OEM company. These key requirements were then benchmarked between the market leader and the case company. Both the market leader and the case company are present and deal with the same customers in the OEM field.

Observations

In addition, participant observations by the researcher from the case company were used and when dealing with large OEMs were collected during the past five years in the industry and used during the CSA stage and for building of the first proposal.

2.4 Validity and Reliability Plan

In order to produce a reliable and valid research, the study must follow quality guidelines. According Quinton & Smallbone (2006: 125), validity and reliability are the key elements to achieve high quality results. Transparency has a major influence in thinking and in the rigour when applying the research approach. There are four ways of ensuring the validity of the research (Yin 2003). The ways are internal validity, construct validity, external validity and reliability.

Internal validity focuses on if what was actually measured was what was intended to measure in the beginning of the research. Internal validity can be seen as particular strength of qualitative research because the vast amount of data collected during research itself is sufficient to tell something about the subject of the study (Quinton & Smallbone, 2006). In this study, internal validity of the research will be ensured by clearly defining the business challenge, objective and the outcome.

Construct validity focuses on demonstrating that a research indeed measures what was stated to be measured. There are three ways to increase the construct validity according to Yin (2003). The first way is to establish a chain of evidence, the second is the use of multiple sources of evidence and the third way is to have key informants to review the research draft. The structure of the thesis should rigorously follow the research design in order to handle the research data systematically. In this study, the research data will be collected from several different sources, in form of interviews, benchmarking, observations and company documentation, in order to make sure that collected data is valid. The collected data will be reviewed by the key stakeholders.

External validity focuses on "whether the results of research could be applied to other contexts or situations and to what extent this may be possible" (Quinton & Smallbone, 129). According to Yin (2003), "the replication of case study methods can achieve greater generalizability of theory". Having a meaning that the research can be reproduced. In the content of this study, it means to produce a model that can be scaled to other, similar OEM in the field.

Reliability focuses on "whether the same findings would be obtained if the research were repeated, or if someone else conducted it" (Quinton & Smallbone, 129). One of the measures to strengthen reliability of the case study research is to follow the research protocol from the research questions to conclusions (Yin 2003: 105). This method is frequently used in cases where the research design acts as a road map for the researcher.

In this study, by following the road map the research study will be more rigorous and the available research data will be handled systematically. Reliability of this study is planned to be further ensured by using triangulation in the data collection. In this study, data will be collected from interviews of the pilot company, from external consultant, from case company employees, from competitor benchmarking and from participant observations by the researcher gathered during the five year time of working in this industry. The interviews will be analysed, coded and used as field notes. The gathered data will be reviewed by the key stake-holders.

Finally, the researcher himself can have bias when conducting a study. In this study, the researcher's bias will be taken into consideration in two ways. The role of the researcher as part of the case company will be clearly stated and a neutral approach to research data collection will be consciously observed in order to have reliable and valid data.

3 Current State Analysis

This section discusses the case company's current way of running its business, its position in the market and identifies its strengths and weaknesses in the relevant market segment. This section also compares the case company with the current requirements for a preferred supplier of the selected OEM company. At the end, the outcome of the current state analysis identifies the required fields of development to become more attractive as a business partner in the eyes of the OEM.

3.1 Overview of the CSA Stage

Five separate goals was set for the Current State Analyses. The first goal was to find out the basic requirements of the pilot OEM company for starting a co-operation. For this purpose, the study interviews the pilot OEM company key stakeholders from the commercial and technical perspective in order to receive a complete picture of the pilot OEM company requirements. By understanding these requirements, a further step for getting closer to starting the co-operation could be taken.

The second goal of the CSA was to identify the existing and missing parts in the offering and operations of the case company in relation to the requirements set by the pilot OEM company. For this end, the study performs a rigorous search for strengths and weaknesses in the case company and compares them to the preferred supplier of the selected OEM company. These requirements set by the pilot OEM company are identified through multiple interviews with the key customers who were co-operating already with both, the case company as well as the preferred supplier of the pilot OEM company. This benchmarked preferred supplier was already a supplier of the pilot OEM company for some time. These findings reveal the case company missing attributes of becoming a supplier for the pilot OEM company.

The third goal was to identify the case company's current market position against the preferred supplier. For this end, the study benchmarks the case company against the preferred supplier of the pilot OEM company. These results would be used when searching for potential partners in order to match with the pilot OEM requirements.

The fourth goal was to revise and back up the findings of the interviews with the pilot OEM company as well as the key customer interviews, by using own observations during five year period of meetings and negotiations with the pilot OEM company. Based on that, the fifth goal was to form a complete understanding of the case company existing and missing attributes. The case company weaknesses would be used to search for the relevant business best practice, so that to improve the completive position of the case company, and later on for building up the first proposal in section 5.

3.2 Case Company and Its Background

The case company is a small company operating in Finland. The company was founded in November 2009. The case company is working in co-operation with its global Italian partners. The company's sales representative represents the products coming from two Italian Hydraulic Manufacturers. The sales responsibility area is the whole Finland. The case company offering is related to selling of the components to the Finnish industry, giving technical support for the customers, assisting customers with component start ups' and taking care of the after sales.

The main customers of the case company are working in mobile (moving machinery) and industrial sectors (stationary machinery) with hydraulic equipment as part of their machine construction. Example of the industrial sector customer is Valmet Technologies which is manufacturing paper machines, and an example of the mobile sector customer is Bronto Skylift which is manufacturing mobile elevating platforms. As the OEM customers typically require complete systems, they are not too willing to purchase straight from the component supplier such as the case company. In order to fulfill the OEM requirement, a partnership with Hydraulic System integrators is often necessary. Thus, System integrators are also a target customer for the case company. The case company is also working together with two Finnish dealers importing the Italian partners' components from Italy.

3.2.1 Current Offering: Its Strength and Weaknesses

The current offering of the case company is related to selling the components to the Finnish industry, giving technical support to the customers, customer component start-ups' and taking care of the after-sales.

The components sold to the Finnish industry are: hydraulic pumps, valves, cylinders, electronics for controlling the hydraulic actuators and complete hydraulic power units manufactured in Italy. Hydraulic components are mainly used in mobile and industrial application. Examples of the mobile applications are mobile elevating platforms, forest machines, excavators and vessels. Examples of the industrial applications are stationary sheet metal bending and cutting lines, paper machines and hydraulic presses.

The technical support and start-ups' are given through telephone communication, remote monitoring through web-based platforms and if needed by being present at the customer's facility. After-sales matters are taken care of locally in Finland and if needed dealt together with the Italian partner.

Based on the results of the interviews conducted for current state analysis with the key customers, the case company strengths and weaknesses relate to the three main areas *in the current Offering, as* shown in Table 4 below.

Table 4. The case company Offering strength and weaknesses.

<u>Strenghts</u>	<u>Weaknesses</u>
❖Product Customization	➤ Limited Product Range
❖ Competitive Prices	➤ Difficult Documentation
❖Special Niche Products	► Local System Design missing

As shown in Table 4 above, the main strengths of the case company relate, first of all, to high knowledge in product customization. The case company has standard line of products but in front of a reasonable request product customization is

available. The product customization requires a certain volume for the product but can be realized in a short notice. This gives an advantage to some of the competitors in the market. Also the case company is present in the major market areas of the pilot OEM company and has own production and product development.

The second major strength is *the competitive prices* of the case company compared to the main competitor in the market making the market penetration possible. The competitive pricing is related to high production volumes and sophisticated production methods. The price level is interesting for the possible partners in the field and the product range is vast enough to be a secondary option for challenging the market leader.

The third major strength is *the niche products* available from the case company. One example of such products is the explosion proof valves. They also make an excellent example of product customization. The requirement for this product customization was customer driven. The niche product means a small component segment where there are really few manufacturers in the world and the competition is less. In this component segment the case company has the widest product range in the world for explosion proof industrial valves.

On the other hand, the case company was found to have a number of serious weaknesses. The case company weaknesses are related, first of all, to a limited product range meaning that the case company is able to supply hydraulic pumps, valves, cylinders, electronics for controlling the hydraulic actuators and complete hydraulic power units. But the preferred pilot OEM company supplier is able to supply all the above mentioned and also hydraulic motors, range of screw-in valves, hydraulic transmissions, drive motors, electronics and in-house training, designing and repairing. But even if the product range is limited, the case company has the possibility of customizing products for the pilot OEM company which is a great advantage on the other hand.

The second major weakness is the technical documentation that could be more informative, from the customer's perspective. Presently, when requiring some highly detailed information related to the component functionality, the customer

sometimes needs to reach the case company in order to find answers to these small technical details.

The third major weakness is *the missing local system designing* meaning that the case company does not have resources to combine different components into the complete systems. The case company's Italian partner is making this system designing in Italy but mainly for the Central European market. This weakness is related to the large OEM occasional requirements for complete systems. This weakness can be overcome by making co-operation with a local system integrator.

3.2.2 Current Operations: Strength and Weaknesses

In order to understand the current position of the case company, in addition to the current offering, the current ways of operations also need to be analysed.

Presently, the case company is working as a sales office for the Italian partners with sales responsibility and independent decision making power for the whole Finland. The main sales target is to acquire new OEM customers that will be working directly with the Italian factory. The case company responsibility is to identify and open the discussion with a potential new OEM customer. All the identified OEM companies need to have sufficient volume of purchases from the case company offerings in order to start discussions with the OEM company. This requires efforts to identify suitable companies. When the suitable OEM companies have been identified an offer for the required services can be placed. And business negotiations can proceed in order to form a business contract between the new OEM customer and the Italian partner. The case company offers components directly from Italy and support services as mentioned before locally.

The case company is also working with two local Finnish dealers. The local dealers are both selling the components from the case company Italian partner as well as from several other manufacturers of hydraulic components worldwide. The dealers are additional help in the Finnish market. One of their biggest advantage is that they are having local stock in Finland in contrast to the case company.

The strength and weaknesses of the case company operations are shown in Table 5 below.

Table 5. Strengths and weaknesses of the case company operations.

<u>Strenghts</u>	<u>Weaknesses</u>
❖ Fast Decision Making	➤ Low Brand Value
Listening to Customers	Limited Resources
Fast Delivery times	➤ Delivery Performance
Working with Experts	➤ Missing Local Partner
❖ Active Sales	➤ Vulnerable for Market Fluctuation

As shown in Table 5 above, the main strengths of the case company are, first of all, the fast decision making. Fast decision making relates to the relatively medium company size, with a low level of bureaucracy needed for the decision making. The decision can be made locally and quickly, without any long permission process coming from several levels of management hierarchy. Second, the case company is heavily focusing on the customer service meaning that it is *listening to the requests of the customer* in order to be better than it is global competitors. Listening to customer requests is also linked to the ability of making product customization due to flexibility and possession of high knowledge in product customization. This gives an advantage over some of the competitors in the market. Also the case company is present in the major market areas of the pilot OEM company and has own production and product development.

The third major strength is *the fast delivery times*, especially related to sophisticated production and modular product concept. All the needed parts for the components are ready in stock in the Italian partners' factories. This shortens the lead time for components in production. The fourth strength relates to *involvement of experts*. Regularly held product trainings at the Italian partners facilities make sure that the case company has updated information about the components. Therefore, the customers are always having the latest information about the prod-

ucts and product developments. The case company has an active sales representative working in the field which is actively responding to the customer inquiries.

As for the main weaknesses of the case company, its first weakness is its *low brand value* locally and globally. The low brand value means that the case company has not been known enough in the global and local market. Even though the case company has been producing hydraulic components since 1957, it has remained for a long time in the home market area, Italy, where it is a market leader. The low brand value forces the customer to make more sales effort to their own customers in order to justify the use of the case company components compared to the main competitor that is globally a well-known brand.

The second main weakness of the operations is the limited resources. Limited resources are related to having manufacturing only in Italy and China. Research and development is only present in Italy. Local service centers are only available in Italy, China and USA. The case company and it is partners do not have the same material or financial resources available as the multinational market leaders have.

The third major weakness in the operations relates to the worries of *delivery performance*. The worries emerge because the case company does not have a local stock in Finland. The case company is a sales office. The case company does not have much power over the logistic partners. As the case company is not normally taking care of the logistics but instead the customers are taking care of the logistics. If the logistic partner of the customer makes a mistake with the delivery it can cause problems also for the case company.

The next weakness relates to the case company missing a strong local partner with system integrator capabilities and which would also have a good relationship with the local OEM companies in the Finnish Industrial market. The weakness relates to the way the Finnish dealers work compared to other European countries. Elsewhere in Europe all of the case company Italian partners dealers work as system integrator but in Finland this is not the case.

Finally, the small to medium size of the case company and it is Italian partner is the reason for vulnerability to the worldwide market fluctuations. Even though the case company has products for several different market sectors, for example, oil & gas, power generation, mining and off shore. This weakness also connects to the lack of resources and the low brand value.

3.3 Business Requirements from the Pilot OEM Company

In order to find out the case company strengths and weaknesses, from key customer perspective, the case company strength and weaknesses were evaluated under the requirements set by the pilot OEM company. In the evaluation of these attributes, the goal was to identify the case company strength and weaknesses and specifically compare them to the main competitor strength and weaknesses. The results of these two evaluations are used together for benchmarking the case company to the main competitor later in this thesis.

3.3.1 Analysis of Business Requirement from the Pilot OEM Perspective

The case company has been trying to enter the large OEM field in the Finnish hydraulic market for the past six years. There has been several discussions with several potential large OEM companies. In order to enter in an active business relationship with the large OEM company, there was a need to find out the requirements set for the supplier evaluation of the OEM customer. In this analysis section the requirements of the pilot OEM company have been studied and compared against those possessed by the case company.

In order to identify the requirements there has been several interviews with the key stakeholders of the pilot OEM company. The goal of the interviews were to:

1. Identify the requirements of the pilot OEM company, 2. Identify the case company current position and 3. Identify the case company current strength and weaknesses, seen from the pilot OEM company key stakeholders perspective.

First, the key requirements of the pilot OEM company were identified as summarized in Figure 2 below.

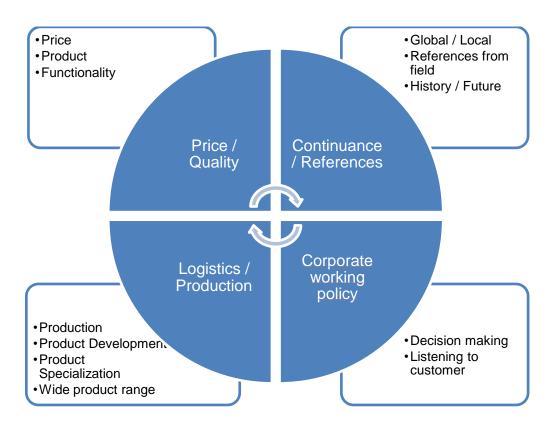


Figure 2. Key requirements from the pilot OEM company.

As shown in Figure 2 above, the key requirements are divided into four different sectors: Price / Quality, Continuance / References, Logistics / Production and Corporate working policy.

In The *Price / Quality* sector, the pilot OEM company is looking for *competitive prices* for the components in question compared to the current supplier prices. In order to have a reason for switching to a new supplier there has to be a meaningful price benefit for the purchaser, before evaluation for new suppliers is even possible. Another possibility of being differentiated from the competitors is to be better by having superior technology or functionality in products. This could make a technological advantage in the market for the purchaser. This, however, needs to be verified by the purchaser with real field tests. This is all relates to *the customer value* perception.

In the *Continuance / References* sector, the pilot OEM company is evaluating if the possible new supplier is a local or global supplier in the market. The target is to have *a global supplier with local presence* in *different main market sectors* of the pilot OEM company. Therefore, any possible supplier company references

are extremely important for the pilot OEM company because this is a clear evidence of the supplier's functional and reliable components.

"Good references are a real door openers"

(Informant A)

For the pilot OEM company, the possible supplier history is showing whether the supplier candidate company has already accumulated extensive knowledge in the field, making it a more reliable supplier. A good foundation for the company's future as a supplier has to be visible and proven.

In the *Logistics / Production* sector, the pilot OEM company is evaluating if the supplier has it is *own production capabilities*. For a supplier, this is mandatory to have. Also own product development demonstrates that the company is putting efforts in building and improving it is own products. Product specialization is a further step forward from manufacturing and product development. This enables the supplier to meet the special requirements set by the pilot OEM company.

"The product specialization is a way many companies have started working as a supplier for the pilot OEM company"

(Informant B)

It means that a product range of the potential supplier company has to be adequate to serve the pilot OEM company.

In the *Corporate working policy* sector, the pilot OEM company is evaluating if the supplier is *fast enough* to react on the demands of the pilot OEM company. The decision making inside the supplier company has to be fast in order to tackle problems from the field or new product development needs from the pilot OEM side. The supplier has to listen and to meet the pilot OEM company needs.

The evaluation of the *decision making* abilities of the supplier company is related to whether the supplier can make decisions locally, or the decisions are made on the company headquarter level. *The local decision making* is preferred due to the faster responses for the customer requirements.

Next, the evaluation for *customer references* is related to having *at least one major competitor* using the component supplier components in the competitor machine. This is a strong sign of reliability and lowers the barrier of selecting the component supplier.

3.3.2 Prioritization of Business Requirements from the Pilot OEM Perspective

Although the key requirements from the pilot OEM company were established, these requirements and their evaluation criteria have different levels of importance for the key stakeholders of the pilot OEM company. These different criteria levels were further analyzed and the results of the prioritization of the requirements by the pilot OEM company are summarized in Table 6 below.

As shown in Table 6 below, the pilot OEM company has three different levels of criteria for the required attributes for the supplier. In Table 6, the red colour marks the high priority attribute; yellow stands for the average priority attribute, and green for the low priority attribute.

As seen from Table 6, the pilot OEM company has an absolute priority for the following four attributes demonstrated by the supplier. First of it, the supplier should have *high product quality*. Second, the supplier should have *very good logistic skill* meaning that all the shipments should be delivered on time. Thirds, the manufacturer should be *global* in order to support the pilot OEM customer locally in their global market places. Finally, the supplier should have *good references* from the pilot OEM customer business field in order to start a possible cooperation with the pilot OEM customer.

As for the average priority, the pilot OEM company has a requirement for moderate component price, operating performance and continuity. There are also requirements for existing production, product development and product customization; as well as for a sufficient product range, efficient decision making and the ability to follow customer requests.

As for the low priority, the pilot OEM company assesses the scale of local manufacturing to be low.

Table 6 demonstrates the priorities of the pilot OEM company as for the supplier requirements.

Table 6. The different evaluation criteria for the different attributes.

Topic	Priority (written)	Priority (colour)
1. Component Price	Average	
2. Product Quality	High	
3. Operating Performance	Average	
	l	
4. Logistics	High	
5. Global Manufacturer	Ulah	
5. Global Manufacturer	High	
6. Local Manufacturer	Low	
or Essential and a second	2011	
7. References	High	
8. Continuity	Average	
9. Existing Production	Average	
	I -	
10. Existing Product Development	Average	
11 Frieting Product Customization	Average	
11. Existing Product Customization	Average	
12. Product Range	Average	
2211 Todace Hange	7.17-01-08-0	
13. Efficient Decision Making	Average	
14. Following Customer Requests	Average	

Based on the identified priorities, and by comparing them to the strength and weaknesses related to *the offering* of the case company (done in the previous section), the following conclusions can be made. First, the case company has been successful in offering *competitive product prices* and *high product quality* (which makes priority 2 (absolute) and priority 1 (average) for the pilot OEM company). The reason for success in these criteria are related to high production volumes and sophisticated production methods of the Italian partner.

Second, the offering of the case company has successfully meet criteria related to *product development* and *product customization* (which makes priority 10 and 11 (average) for the pilot OEM company). The reason for being successful in these criteria is related to high knowledge in product customization. The case company has standard line of products but in front of a reasonable request product customization is available. Moreover, although the product customization requires a certain volume for the product, it can be realized in short notice by the case company.

Third, the case company cannot yet meet the criteria in *the offering* for the *product range* (which makes an priority 12, average, for the pilot OEM company).. The reason is related to the Italian partner having made a strategic decision of which products to include in the product portfolio. The selection in the product portfolio needs to match the expertise that the Italian partner is currently possessing and the corporate strategy that the Italian partner has set for the future.

Based on the identified strength and weaknesses related to *the operations* of the case company analysed in the previous section and comparing the results to the above table of evaluation criterial, the following conclusions can be made.

The case company has been successful in operations related to *efficient decision* making and following customer requests (which makes an average priority 13 and 14 for the pilot OEM company). The reason for being successful in these criteria is related to the relatively medium company size meaning a low level of bureaucracy needed for the decision making. The decision can be made locally without needing the permission of several levels of bosses. The case company is heavily focusing on the customer service meaning that it is listening to the requests of the customer in order to be better than it is global competitors. Listening to customer requests is also linked to the ability of making product customization.

Next, the case company has been on a moderate level in operations related to operating performance and logistics (which makes an average priority 3 and absolute priority 4 for the pilot OEM company). The reason for being on a moderate level in these criteria is related to having standardized product manufacturing, having educated people working in administration and using reliable partners in

logistics. Related to *the logistics* the case company and the Italian partner have fast delivery times for the products but is missing a local stock in Finland.

Presently, however, the case company cannot yet meet the criteria in the operations for the being a global manufacturer and having good global references (which make absolute priority 5 and 7) and ensure continuity to market fluctuations (average priority 8 for the pilot OEM company). The reasons for not being a global manufacturer and lacking of good global references relate to remaining a long time inside the Italian home market and for having a limited product range and limited resources compared to the market leader. Even though the case company has products for several different market sectors, for example oil & gas, power generation, mining and off shore. Importantly, the case company and it is Italian partner do have good global references, but not in the industrial field of the pilot OEM company that is setting up the requirements for co-operation. Finally, the case company and it is Italian partner are vulnerable to market fluctuations because of the small to medium size of the Italian partner and the micro size of the company in Finland.

3.4 Main Competitor Strengths and Weaknesses in Local Industrial Market

The case company and the preferred pilot OEM supplier are working in heavily competed local industrial market, full of suppliers competing for a limited number of customers. Presently, this market has four to five huge global manufacturers (turnover between 2-15 billion euro) with vast resources and global market presence, along with around 10 medium-sized global manufacturers (turnover between 100-2000 million euro) and medium to high, with global market presence. In addition, there are several local distributors importing hydraulic components worldwide including the case company's two dealers. Some of the distributors have capabilities for system integration. There are also at least eight local system integrators with connections to global market leaders. And new manufacturers are entering the market on a yearly bases.

The heavy competition on the market causes the prices to go down. And the market for the simple hydraulic valves is only driven by the best price offer available. It means the manufacturer selling at the lowest price will make business. This is the situation for the simple valves where the number of the manufacturers

is very high. The market for moderate level of sophistication in hydraulic component is less competed. The number of manufacturers has reduced but the price competition is still very heavy. In the high-end, with the most sophisticated hydraulic components, with for example integrated electronics, the competition is in the hands of a fewer manufacturers but the price level is still competed. Unfortunately, the market for the high-end and most sophisticated hydraulic components is mainly related to hydraulic systems, not separate hydraulic components. In this market sector, the hydraulic manufacturers with the *local built-in house system* designing, assembly and testing hold the key position. Thus, the only possibility for the case company to engage in competition in this field is to find a strong local partner with the system integration capabilities and a local stock.

The main competitor which is also the market leader has strengths and weaknesses which were identified in the customer interviews, are shown in the Table 7 below.

Table 7, The competitor's strength and weaknesses.

<u>Strenghts</u>	<u>Weaknesses</u>
❖ High Quality	➤ High price
❖Complete In-house services	➤Too habit oriented
❖ High brand value	➢Slow decision making process
❖ Good references	Shorter delivery times
❖Complete product range	➤ Small customers don't get full attention

As shown in Table 7 above, the main strengths of the market leader are high quality products and operations. The market leader has complete in-house services. The market leader has high brand value and good references. The market leader has also complete product range.

The market leader's weaknesses are related to a relatively *high price*. The market leader is *too habit oriented* and *small customers* do not get their full attention. Finally, the market leader's *decision making is slow* and *the delivery times* should be shorter.

3.5 Competitor Benchmarking

In order to benchmark the case company against the main competitor, several interviews were held with the case company pilot key customers and Italian partner. The results of the benchmarking are shown in Figure 3 below.

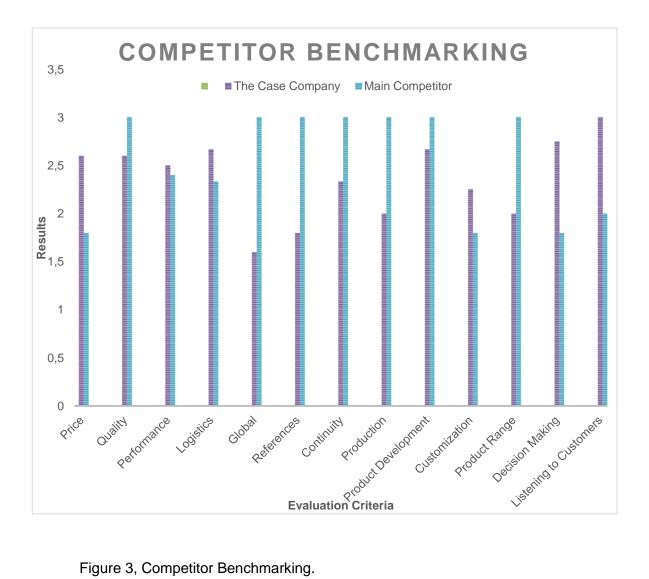


Figure 3, Competitor Benchmarking.

As shown in Figure 3 above, the *Price* evaluation has been done by comparing the main competitor and the case company against each other and as the results show the case company is more competitive with the product prices. The evaluation of the prices included the evaluation of the case company's product prices against the average market price. The results show that the case company's pricing was also competitive in this case. The evaluation of the Quality of the products was done by comparing the main competitor' products against the case company products. The results show that the main competitor products are very high quality products, which is in-line with the market leader position.

Next, the operating *Performance* was measured based on the success of the *product deliveries*, the number of mistakes made in administration and *the speed* of *replying* to the customer inquiries. *Logistics* was evaluated by the delivery reliability. The results show that the case company operates better, especially in Logistics, but the difference is not very significant.

The evaluation if the main competitor and the case company were *Global* was evaluated in terms of global *market presence*, global *manufacturing* of the products, global *sales* and *service organizations*, and global *design* and *technical support* possibilities. The evaluation of *References* was related to having reference from companies within the field of the customer company interview and whether the main competitor and the case company had references in other market sectors worldwide. The evaluation of *Continuity* was based on whether the main competitor and the case company had credible history behind and also a trust worthy future ahead. The results show that the case company lags behind, especially in being Global and References. This confirms the conclusions from the internal analysis.

Next, the evaluation of *Production* was based on evaluation of existing production *locally and globally*. The evaluation of *Product development* was based on the development of *existing and new products* and the company general *focus* in the product development. The evaluation of *Customization* was based on whether the interviewed customer company was able *to get product customization* from the main competitor and the case company. Also *the time* taken for the product customization was evaluated. The evaluation of the *Product range* was performed by comparing the case company products against the main competitor who also is the market leader in the field having *a complete range* of products evaluated in this interview. The results show that the case company lags behind, especially in Production and product range. But the difference is much less in Product development. On the positive side, the company definitely leads in Customization.

Finally, the Decision making was evaluated by comparing the level of hierarchy needed for the decision making in the main competitor and the case company companies. It was also evaluated whether the decision is made on the local level or on the global level. Also the time needed for the decision making was evaluated here. Listening to the customer was evaluated by whether the main competitor and the case company responded to the customer requirements and at what pace. The company that was reacting more eagerly to the customer requirements and at fast paste was given better result. Here, the results show that the case company definitely leads in decision making and listening to customer. This also confirms the internal perceptions of the case company coming from the S&W analysis done internally.

Summing up, the competitor benchmarking shows that the case company is performing better with *the current offering* in the following topic areas: (a) price and (b) product customization. The reason can be explained with focused product range and sophisticated production. However, the competitor is performing better with *the offering* in the following topic areas: (a) product quality, (b) product range, here significantly, and (c) product development. The reason can be explained with vast resources and wide product range together with sophisticated production.

Summing up, the case company is performing better in *the current operations* in the following topic areas: (a) operating performance, (b) logistics, (c) decision making, here significantly, and (d) listening to customers, here significantly. The reason for good operating performance can be explained with very few mistakes in the order confirmations, deliveries and invoicing and good logistics can be explained with fast delivery times from the Italian partner. Listening to customers can be explained with the heavy focusing on the customer service meaning that it is listening to the requests of the customer in order to be better than it is global competitors.

However, the competitor is performing better with *the operations* in the following topic areas: (a) being a global supplier, (b) having global references and (c) having a more secure future ahead. The reason for being a global supplier can be explained with longer company history and more aggressive expansion policy. The reason for having global references can be explained global market presence

and good products. The reason for having a more secure future is related to the available vast financial resources making the competitor a stable company also in a longer run.

3.6 Summary of the Current State Analysis

The current state analysis started, first, with a target to identify the case company strength and weaknesses. These strength and weaknesses were then compared to the preferred supplier of the selected pilot OEM company, thus revealing the key needed requirements for striking a partnership. Also own observations were planned to be used to back up the findings.

Next, the business requirements of the pilot OEM were established through face-to-face interviews with the key stakeholders of the pilot OEM company. The business requirement attributes were derived from these interviews (shown in Figure 3, Competitor benchmarking). From the competitor benchmarking, the case company main strengths and weaknesses were identified in *the current offering* and *the current operations* categories.

Finally, in Table 8 below, the identified strength and weaknesses are compared to the requirements from the pilot OEM company, and simultaneously matched against the competitor current offering and operations. The results represent the current *competitive position* of the case company towards the desired OEM partner and against the competitor.

Table 8, Current competitive position of the case company (based on its identified S&W, requirements from the pilot OEM, and matched against the competitor).

Customer requirements				The Case Company		The Case Company versus	
		The Case Company Offering		Operations		Competitor	
		STRENGHT	WEAKNESSES	STRENGHT	WEAKNESSES	STRENGHT	WEAKNESSES
Competitive Price	Product Development						Product Quality
High Product Quality	Product Customization		Limited Product Range	Fast Decision Making	Low Brand Value	Competitive Price	Global Manufacturer
Good Logistics	Wide Product Range	Competitive Prices	Difficult Documentation	Listening to Customers	Limited Resources	Operating Performance	References
Global Manufacturer	Fast Decision Making	Special Niche Products	Local System Design missing	Fast Delivery times	Delivery Performance	Logistics	Company history and future
Good References	Listening to Customer			Working with Experts	Missing Local Partner	Product Customization	Existing Production
Good Operating Performance	Long history and probable Future			Active Sales	Vulnerable for Market Fluctuation	Decision Making	Product Development
Existing Production						Listening to Customers	Product Range

From the table 8 above, the Low brand value has been selected for the conceptual framework (CF) because of the high relevancy seen from the pilot OEM company key stake holder's perspective. Reference customers and projects from the pilot OEM company market field, is one of the key door opener for a possible new supplier.

Limited resources was also selected for the CF because of the limited range of offering from the case company to pilot OEM company. The in-house design department, warehouse, technical support, logistics and after sales are of high relevancy seen from the pilot OEM company key stake holder's perspective.

Limited product range was also selected for the CF because a limited product range is a risk for usage for the pilot OEM company.

Finally, several interviews with the key customers as well as the numerous discussions with the Italian partner during the last five years related to the pilot OEM strategy of new supplier evaluation has shown similar results as the case company own observations from several meeting with the pilot OEM company during several years of time. The combined results show that the pilot OEM company is open for discussion and is giving an opportunity to start co-operation with the case company. As the case company has noticed during last few years that something is still missing from the case company offerings. The missing weaknesses have been now identified and answers will be searched for in the following Conceptual Framework-section (4.0).

4 Best Practice for Improving the Competitive Position of a Small Supplier

This section discusses the best practice applied by companies to improve competitive position with regard to large OEM. This section focuses on improving product development, improving the offering and finally, improving and better use of available references in the market. In the end of the section a conceptual framework is built for improving the competitive position of the case company.

4.1 Market Forces Competing in the Market and Competitive Position of a Small Supplier

In B2B marketing context, it is normal that one company cannot control the entire range of resources needed to develop a solution to a customers' problem. In order to solve the problem, several instances working together can provide a solution to the customers' problem. The co-operation between the companies forms a cohesive unit (Mattsson, 1980). Inside the cohesive unit resources including knowledge, manufacturing, logistics and services are shared in order build up larger offering entities. The cohesive unit will be later called a *business network*.

In a business network, there is a place for various players, based on the VALUE that they provide to their customers and partners. The supplier evaluation is heavily relying on identifying the right criteria for the buyer and then evaluating the possible suppliers according the selected criteria. The selected criteria may have different level of relevancy and weight factors, and they vary depending on the case. The weight factors are based on the buyers' opinion related to importance or priority of the selected criteria (Min 1993; Patton 1996, 145). The evaluation criteria varies depending on the case. Certain cases might place high value for the logistics meaning that the deliveries must be extremely reliable and another case might place high value on service side meaning a high customer focus.

In the context of an industrial products, these criteria put forward by the customers and partners can be roughly divided into related to *the offering* and to *the operations*. The *limited product range* relates to the offering because it includes the elements related to case company physical products. The *low brand value*

and *limited resources* relates to the operations because they are connected to the working resources of the case company. If a small supplier wants to improve its competitive position on the market, they needs to think of the improvements related to these key directions.

To address the challenges identified in this study, this section will discuss the improvements related only to the limited product range, limited resources and low brand value.

In order to face the challenge of limited product range, product development was found as an answer for the problem. Product development focuses on solving problems related to limited possibilities on competing in the market by increasing the VALUE the company produces for their customers.

In order to face the challenge of limited resources, development of industrial network was found as an answer for the problem. Industrial network is a network of companies focused on solving problem related to limited resources for competing in the market by increasing the case company resources by partnering with another company sharing it is resources.

In order to face the challenge of low brand value, using references was found as an answer for the problem. Using existing references is using existing references from other industrial field in order to lower the barrier of entry to new OEM customers.

These topics will be discussed in detail below.

4.2 Improving the Offering through Product Development

Product development and a limited product range present a significant problem for a small supplier, and this problem can be approached from various perspectives. ONE of possible approaches to address the product development challenges is to consider a solution business.

Companies working in industrial manufacturing field are in order to better compete in the market, transforming from product centric business model toward solution business models. A process oriented view of solution is: "relational and time consuming process involving value creation, customization of solution elements, implementation of customized solutions into the customer's process and customer support during solution delivery" (Storbacka, 2011;Tuli et al., 2007). Meaning that different types of solutions can be developed by companies and at the same time there is a need to change many details from their business models.

Companies starting "servitization" (Vandermerwe & Rada, 1988) are taking a step towards solution business. The earning logic of the company and the position in the value network changes, forcing companies to use and develop capabilities in a different way. Making the "servitization of business" means to add additional value to the core offerings of the company through services. The "value creation for the customer" and the "value capture for the company" in business model definition are the most commonly used elements (Nenonen and Storbacka, 2010). In addition externally oriented, defining the relationships between the different actors in the value networks and recognizing the dynamic change for networked value creation, the business model concept is descripted by Teece (2010) and Zott and Amit (2008).

The transformation toward a solution business model can be divided into four continua (Storbacka et al., 2013). These four continua are: 1) Customer embeddedness, aiming to target selected customers and by understanding their processes to better support their value creation process, 2) offering integratedness, by integrating different elements of process in order to increase value capturing, 3) operational adaptiveness, in order to better facilitate the customers processes a modular thinking needs to be applied, 4) organizational networkedness, by cooperating with different actors of the industrial network a joint solution can be offered to selected customers.

The identified four solution business model continua's are shown in Figure 4 below. In Figure 4, the "Lower level" refers to the current state in the customer offering. The "Higher level" refers to the goal of reaching a higher level of solution based offering including all the four continua mentioned above.

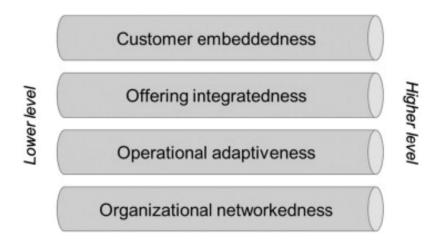


Figure 4. Solution business model (Storbacka et al., 2013: 711).

The customer embeddedness, shown in Figure 4 above, refers to a key result of providing solutions. The development, selling and delivering of the solution is done in a long-term process with the customer instead for the customer. The value creation has to be seen from the perspective of the customer (Brady et al., 2005; Davies, 2004). Specific targets has to be set for the market focus, market segment and customers for the solution business. And market segment specific strategies and business goals has to be set (Cornet at al., 2000; Foote et al., 2001; Miller et al., 2002).

Offering *integratedness* refers to integration of components offered meaning that the customer cannot buy the components separately (Johansson et al. 2003). The customer has no other option than to buy the complete solution from the supplier. Complete solutions are often regarded as a combination of inter-dependent service, goods, systems and knowledge elements forming an integrated system having a higher sum of value together than separately (Johansson et al., 2003; Roegner et al., 2001). Thus, the value for the solution comes from the merger of the separate parts. By increasing the level of integration in solutions the company assumes the role of a performance provider instead of a product provider (Helander and Möller, 2007). The role of performance provider requires deep knowledge of the customers processes and requires creation of new value propositions based on improving the performance (Stremersch, Wuyts and Frambach, 2001). The way of making business changes from selling products or services on a transactional basis towards longitudinal and relational solution selling.

The new and improved way of business making brings continues cash flows to the company.

Operational adaptiveness refers to adaptation of suppliers' solutions from product development all the way to product delivery to the customer's demands and processes. A modular thinking is needed in order to create customer specific solutions (Baldwin et al., 2000; Yigit et al., 2003). Modular thinking influences operational processes and market facing (Meier, Roy and Seliger, 2010). Rapid respond to changing requirements is fundamental and at the same time securing repeatability and scalability of the solutions (Salonen, 2011 and Storbacka, 2011). The companies need to react fast to the customers' changing demands and environments in order to secure fast and flexible offering for the customer. In order to function modularly there is a need for development of effective changing of information and knowledge practices (Arnett and Badrinarayanan, 2005 and Johnstone et al., 2009). A fluent exchange of information is mandatory for making fast decisions and giving out fast responses for the customer. Additionally, for successful integration of solution business and economic viability, the ratio between component integration and tailoring of solutions need to be balanced. With the aim to create repeatable solutions (Foote et al., 2001 and Shepherd and Ahmed, 2000), there also needs to be a financial equilibrium between combination of products and complete solutions. The offering of complete solutions requires a certain level of running longitudinal business. Communication, customization, therefore, one direction is to search for partners - how to integrate into their systems better.

Organizational networkedness implies that the companies within the solution business network increasingly become more committed to each other's processes and activities. Across and inside organizational boundaries this requires process harmonization (Brady et al., 2005; Oliva et al., 2003). The relevant companies inside the industrial network relay on each other by using the resources scattered inside to companies forming an alliance. In order to create and supply repeatable solutions different organizational parts need to create mechanism for integration and interaction within the company (Gann et al., 2000; Storbacka, 2011). For the solution business it is mandatory to have information exchange between different departments, from research and development to service and operations. The front-ends demands for customization needs to be balanced with

the back-ends demands for standardization (Davies et al., 2006; Galbraith, 2002a). The solution delivery should be seen as collaborative effort between several companies within the value network, not as a dyadic exchange between the provider and the customer (Davies et al., 2007; Ivens et al., 2009). The network of companies is a collaborative unit combining and using each other's resources to have a wider offering range for the targeted customer.

Development of one continuum will likely cause changes in other continua as well. The change in the integratedness level of offering will affect the possibilities for co-creation of value with the customers, causes a need for additional partnership in the business network and the opportunities for repeatability, modularity and customization. Figure 5 illustrates the relationships and connections between different continua in the solution business model.



Figure 5. The connections between different continua in the Solution business model (Storbacka et al., 2013: 714).

The key objective of the configuration is to create balance and harmony between the business elements (Miller, 1996; Normann, 2001), which may need several iterations until a sufficient fit has been achieved.

Based on the target for improving the offering set in this study, the directions for efforts as suggested by best practice, can relate to: (a) setting specific targets for

the market focus, market segment and customers; (b) creating a combination of inter-dependent service, goods, systems and knowledge elements, in order to take the role of a performance provider; (c) thinking of a combination of products and complete solutions; (d) combining and using each other's resources in a business network, so that to have a wider offering range for the targeted customer.

4.3 Developing Industrial Networks to Address Limited Resources

In B2B marketing context, it is normal that one company cannot control the entire range of resources needed to develop a solution to a customers' problem. In order to solve the problem, several instances working together can provide a solution to the customers' problem. The co-operation between the companies forms a cohesive unit (Mattsson, 1980). Inside the cohesive unit resources including knowledge, manufacturing, logistics and services are shared in order build up larger offering entities. The cohesive unit will be later called *a business network*.

To fight the limited product range, the answer can be in development of industrial networks. The industrial networks are based on relationships. The relationship is an outcome of an interaction process where two parties have developed connections that produce a mutual orientation and commitment (Håkansson and Snehota, 1995). The relationship is formed between two separate parties having a degree of interdependency and a mutual target.

4.3.1 Defining Business Relationships

Business relationship can be descripted by using two dimensions: the function and the substance. The function is related to "who" is affected in the relationship. The substance is related to "what" is affected in the relationship.

The substance in business relationship can be divided into three different layers:

1) Activity layer, activities that connect various internal activities of two separate parties. 2) Resource layer, enables the common use of resource elements for the parties. 3) Actor layer, established relationship defines how the actors evaluate, perceive and treat each other. The interplay of the three substance layers of the business relationship are shown in Figure 6 below.

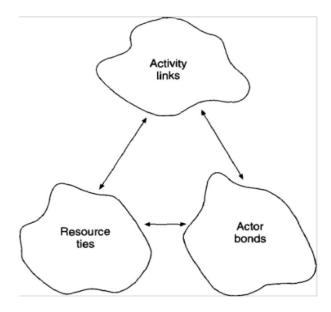


Figure 6. Interplay of the three substance layers of the business relationship (Håkansson and Snehota, 1995: 32).

As seen from Figure 6 above, the activity link relates to administrative, commercial, technical and other activities of a company that can be shared with another company as the relationship develops. The Resource ties relate to material, technical, knowledge resources and other intangible resource elements that two companies can share. The Actor bonds relates to how the two actors recognize each other. The bonds between the two actors are formed based on interaction.

According to Håkansson and Snehota (1995), the function in business relationship can be divided into three different functions: 1) Function for the dyad, relationship where interaction appears and something is produced. 2) Function for the individual company, each of the companies can independently decide what to do internally and in other relationships. 3) Function for the third parties, relationships are connected in a bigger network of companies. What happens between two separate companies can have an affect also on third parties involved in the bigger network. The single actor function of a relationship is shown in Figure 7 below.

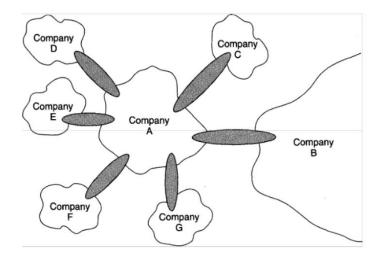


Figure 7. Single actor function of a relationship (Håkansson and Snehota, 1995: 35).

As seen from Figure 7 above, the relationships between the companies can vary. The business relationships offer the company many additional benefits but also at the same time bring substantial costs. The relationships affect the company potential on it is activity structure, collection of available resources and it is organizational structure. The relationship with the companies in the network offer the possibility to develop competence, productivity and innovativeness of the company.

The function of a third parties in relationship is shown in Figure 8 below.

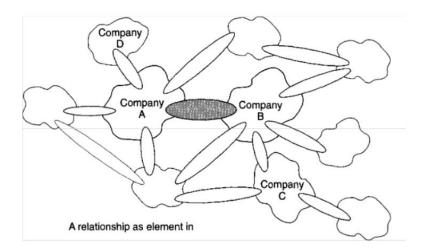


Figure 8. Network function of a relationship (Håkansson and Snehota, 1995: 36).

As seen from Figure 8 above, as the relationships are connected a change in a substance of the relationship between two companies can have an impact on the other companies present in the same network. Every relationship is affected by the network function. Also the opposite effects from the network structure are possible. The business network is a conscious and goal-seeking structure full of companies trying to improve their own position.

4.3.2 Developing Business Relationships

Relationship builds up between two companies when activity links, resource ties or actor bonds are formed. The business relationships are developed by two companies both having their own requirements and capabilities. The requirements and capabilities are results from the existing relationships of the companies. This relationship between the different activities is shown in Figure 9 below.

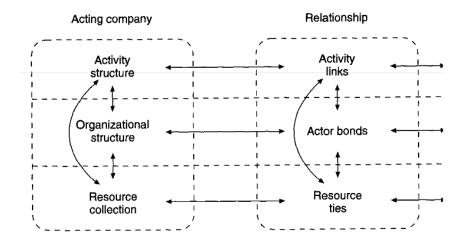


Figure 9. Relationships and the company (Håkansson and Snehota, 1995: 39).

As shown in Figure 9, the activity links as well as the actor bonds and resource ties of each of the company form together the activity structure, resource structure and the organizational structure of the two companies. The sum of the assets and resources are the combination of the individual companies. The activity structure, organizational structure and the resource collection of the companies will influence what kind of ties, bonds and links the can be developed in the relationship networks.

Relationships between two companies are not only effected by the direct involvement and their direct relationships. Other companies and relationships in the network may be affected. The relationship and the network has a two-way connection between them as shown in Figure 10 below.

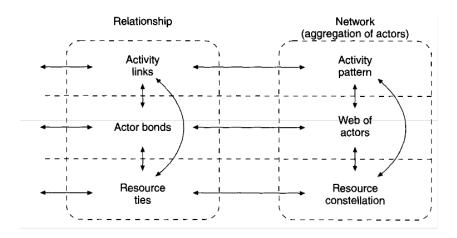


Figure 10. Relationships in a network (Håkansson and Snehota, 1995: 39).

As shown in Figure 10, an activity link is part of a wider network of activity patterns that are all having a relationship with each other. A resource tie is part of a wider network of resource constellations that companies can utilize. A single actor is part of larger web of actors. Development of relationship between two companies has an organizing effect on the whole network of companies.

4.3.3 Managing Business Relationships

There are three critical parts in managing the business relationships. 1) Marketing and purchasing, the most important part is to keep the customer and supplier relationship productive. 2) Capability development, exploiting the available resources in the network to improve the company position. 3) Strategy development, maneuvering the company for a better position in the network.

The critical issues in coping with the business relationships are shown in Figure 11 below.

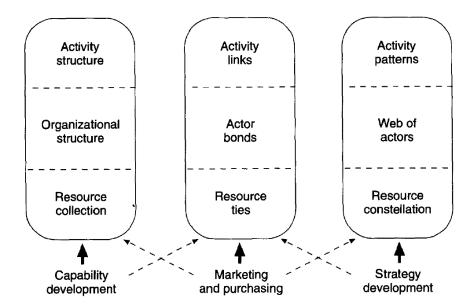


Figure 11, Critical issues in coping with business relationships (Håkansson and Snehota, 1995: 42).

As seen from Figure 11, the marketing and purchasing is related to maintaining a productive relationship between the customer and the supplier.

Summing up, the way to develop the relationship is to build activity links, resource ties and actor bonds in order to improve the partnership with the counterpart. The capability development is about developing the company's own productivity, innovativeness and competence through the available resources in the network. The strategy development is about positioning the company better in the selected network of companies. The critical issue is the monitoring of the changes in the network and how they could affect the company and the wider activity pattern, resource network and web of actors. The company has to assess the changes in the network and if needed to make modifications to the strategy in order to maintain a favorable position in the network.

4.4 Using References to Address Low Brand Value

Reference is descripted as the suppliers' relationship to existing or previous customer which can be evaluated in terms of suppliers' service, product, management or co-operation performance from the customers' point of view (Salminen & Möller 2004: 20). In a reference, the customer is the assessor of the suppliers'

performance. Reference must not be confused with the term "referral". Referral is related to a sales technique of using existing customers name in order to promote oneself to a potential new customer (Clemente 1992, 299). Referral is a process of transferring something to someone. The attention in the definition of a "reference" must be focused on the relationship between the supplier and the customer.

Selection of a new supplier is a high risk for the potential buyers and therefore the use of customer references in industrial complex solution increases the credibility of the supplier in the eyes of potential buyers (e.g., Windahl et al., 2004; Salminen et al., 2006; Veres, 2009). Using existing customer references the supplier can lower the barrier of acceptance from the buyers' perspective.

In Industrial marketing the customer references are being used externally and internally (Jalkala & Salminen 2010). Externally references are being used for four different situations. 1) Using reputable customer as status-transfer. 2) Using previous successful supplier selection projects as signs of passing the evaluation. 3) Showing professionalism in complex solutions. 4) Providing indirect evidence of experience in supplied technical functionality and indirect evidence of delivering customer value. Status-transfer means using existing reputable customers from other industrial field as references for the targeted market field customers. External references are being used for attracting potential new buyers and lowering the barrier for entry.

Internal references are also being used for four different situations. 1) Improving the organizational learning. 2) Upgrading the offering performance. 3) Motivating the company employees. 4) Having a better understanding of the customer requirements, customer value proposition and internal expertise. Internal references are being used for improving and developing the company internal processes (Jalkala and Salminen, 2010: 987).

The use of suppliers' references are divided into three modes (Salminen 1997).

1) The final aim of using the references. 2) The needed general information of utilising the references. 3) The targeted outcome of the reference utilisation.

The text book view of reference utilisation is shown in Table 9 below.

Table 9. Reference utilisation (Salminen and Möller, 2004: 137).

Goals	Practices	Desirable Outcomes
Pursue new customers	Reference lists	Established reputation
Sell more or new products to existing	Articles	Established credibility
customers	Press releases	Convinced customer about competence
Focus offers in promising markets	Reference visits	Reduced perceived risk
	Promotional material	
	Seminars	

As shown in Table 9 above, the aim of using the references is divided into three sections. 1) The acquisition of the new customers (Jackson 1985, 111; Hutt and Speh 1992, 118; Hanan 1995, 175 and Bruhn 2003, 254). 2) Increasing the sales of current or new products to existing customers (Hanan et al. 1978, 120; Riggs 1983, 61; Christopher et al. 1994, 22 and Maister 1996, 258). 3) Targeting offers on the most promising markets (Stewart and Stewart 1984, 217). The aim of using references is used for maximizing the acquisition of new customers' at the most favourable market for the supplier. Depending on the situation a correct practice of using references is available. Depending of the situation the following means are available: reference lists, reference sites or visits, promotional material, press releases and seminars. Reference lists are being used when making written offers. Reference visits are used for initiating co-operation with a new customer. The written marketing material is being used at fairs and seminars. The targeted outcome is to reduce the economic and performance risks of the potential new customer.

Summing up, by using existing customer references the supplier can lower the barrier of acceptance from the buyers' perspective. The way to lower the barrier can relate to: (a) Using reputable customer as status-transfer; (b) Using previous successful supplier selection projects as signs of passing the evaluation; (c) Having a better understanding of the customer requirements, customer value proposition and internal expertise.

4.5 Conceptual Framework of This Thesis

The conceptual framework of this study is built on combining three elements from sections: 4.2 product development, 4.3 offering and 4.4 references. The elements in the conceptual framework answer to the identified weaknesses of the case company. The conceptual framework is shown in Figure 12 below.

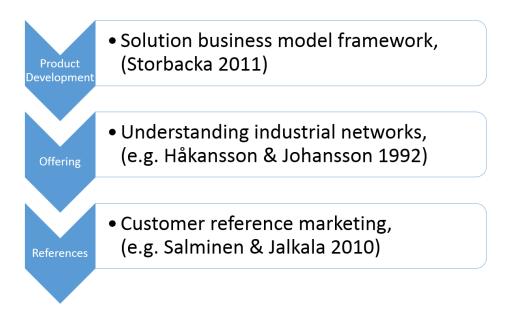


Figure 12. Conceptual Framework for improving the competitive position of a small supplier in the market.

As shown in Figure 12, the conceptual framework has three elements. Each of the elements proposes a solution to the specific problem mentioned in the left side arrow pointing downwards from the best practice available.

The discovered best practice are descripted in details on the right side of each of the arrows pointing downwards. The best practice related to solution business model framework (Storbacka, 2011) have an answer for the Product Development problem. Solution business framework (Storbacka, 2011), suggests steps for solving limited product development capabilities. Servitization is the solution for limited product development. Servitization means a change from a product centric business model towards a solution centric business model presented by Storbacka in the Figure 4 and 5. For the proposal building were selected: (a)

setting specific targets for the market focus, market segment and customers; (d) combining and using each other's resources in a business network, so that to have a wider offering range for the targeted customer.

The best practice related to understanding industrial networks (Håkansson and Johansson, 1992) have an answer for the Offering problem. The second step, understanding industrial networks (Håkansson and Johansson, 1992), suggests steps for solving the problem related to limited offering. Relationships are the solution for the limited offering. Building a relationship among other companies in the industrial network provides the use of additional resources, knowledge and organizational benefits as presented by Håkansson and Johansson in Figures 9 and 10. For the proposal building was selected: (1) strategy development for positioning the company better in the selected network of companies.

The best practice related to customer reference marketing (Salminen and Jalkala, 2010) have an answer for the references problem. The third step, customer reference marketing (Salminen and Jalkala, 2010), suggests steps for solving the problem related to references. Existing customer references are the solution for lack of references. By using existing positive and well known customers there is a possibility to make status-transfer in the benefit of the case company as presented by the Salminen and Jalkala in Table 9. For the proposal building were selected: (a) Using reputable customer as status-transfer; (b) Using previous successful supplier selection projects as signs of passing the evaluation; (c) Having a better understanding of the customer requirements, customer value proposition and internal expertise.

5 Building of the Proposal for the Case Company

This section merges the results of the current state analysis (section 3) and the conceptual framework (section 4) towards building of the proposal to improve the competitive position of the case company with regard to large OEM.

5.1 Overview of the Proposal Building Stage

The goal of this proposal building stage is to formulate a proposal that improves the case company competitive position with regard to large OEM customers. The forming of the proposal is done by finding answers to the identified weaknesses discovered in the CSA section. The identified weaknesses were the ones where the case company has to improve the performance. The identified weaknesses are related to the limited product range, low brand value and limited resources compared to the preferred supplier of the pilot OEM company. By proposing a solution for these weaknesses and by combining the identified strengths in combination with the key stakeholder knowledge a proposal will be build.

Conceptual framework has been built on best practice found from the literature related to the identified CSA weaknesses. The best practice from the literature gives guidelines for how to focus on solution building in order to solve the problem of limited product range. The best practice gives guide lines how to use the existing external marketing assets to show higher brand value. Finally, best practice also gives guidelines how to acquire more resources by making co-operation with other companies with similar limitations.

The building of the proposal has been done through qualitative interviews with the case company key stakeholder having 25 years of experience in the field of supplying the OEM customers. The interview was based on the identified strength and weakness of the case company compared to the preferred supplier of the pilot OEM from the CSA section and the best practice found from the literature related to the identified weaknesses of the case company. By combining the information from CSA, conceptual framework and the key stakeholder extensive knowledge in the field the proposal was formed.

5.2 Findings of Data Collection 2

The building of the proposal has been co-created with the case company key stakeholder having 25 years of experience working with and for the large OEM companies. The proposal building has been done through two qualitative interviews. The building of the proposal started with going through the weaknesses identified in the end of the CSA. Followed by studying the researched best practice found in the Conceptual Framework section to answer to the identified weaknesses. Combining the above mentioned topics with the extensive knowledge of the key stake holder of the case company and using the identified strengths from the CSA to back up the proposal.

The structure of the proposal building will follow the steps identified in the Conceptual Framework. The identified three steps are:

- 1) *Product development*, which will be improved by using the solution business framework developed by Storbacka, 2011.
- 2) Offering, which will be improved by using the understanding of the industrial networks developed by e.g. Håkansson and Johansson, 1992.
- 3) *References*, which will be improved by using the customer reference marketing developed by e.g. Salminen and Jalkala, 2010.

5.2.1 Product Development

The weakness of the product development meaning in this context limited product range (section 3.6) compared to the selected preferred supplier for the pilot OEM customer. The product development was identified as a main weakness in the CSA stage. After identifying the requirements set for the co-operation from the pilot OEM customer side. And benchmarking the selected preferred supplier for the pilot OEM customer against the case company. The results showed that the pilot OEM customer values the product development as an average priority in the selection of the possible new suppliers.

The case company is producing around 40 percent of the components used by the pilot OEM company compared to the preferred supplier of the pilot OEM company which supplies the complete range of the required products. The preferred supplier of the case company is a multinational company expanding also by acquisitions of a smaller companies working in the field. According to the key stakeholder of the case company, the case company instead is:

"a privately owned family company that has focused the production to the selected components having high quality because of the excellent know how in the products, having very competitive prices because of high production volumes of products and is cost effective on production by optimizing the product processes because of the high quantity of products manufactured"

(Informant C)

The key stakeholder continues:

"when buying everything from one source, most of the time you are not any more cost effective because you are not buying the best parts at best price any more"

(Informant C)

This puts the focus on the case company offering that is having selected components at high quality and with very competitive prices and with short delivery times enabling easy logistic planning.

In order to improve the case company competitive position, best practice revealed the solution business framework (Storbacka, 2011) as an answer for the weakness. The "servitization", with the aim of understanding the selected customer processes to better support their value creation process will be used to improve the case company competitive position in front of the pilot OEM company. By having a more profound understanding of the pilot OEM company, the case company has better means for offering related to specific customer needs and a possibility to propose new ideas on improving the OEM customer processes and products. Based on the interview with the case company key stakeholder this is a valid point for improving the OEM customer processes.

In addition, by co-operating with different actors of the industrial network in order to offer a joint solution will widen the case company offering and meet the requirements of the pilot OEM customer. The case company key stakeholder was seeing this as a good idea but not functional in this specific case. According to the key stakeholder:

"We should focus our efforts on our strengths which are: listening to the customer, fast decision making, product customization and fast delivery times which enable the OEM customer better plan the production as well as limiting the stock value"

(Informant C)

Fast delivery times helps the planning of the logistics which is a high priority in the selection of the new supplier. The results of the proposal for improving the case company position related to limited product range can be seen in the table 10 below.

	Issue	Suggestions
1	Limited Product	The key stakeholder of the case company
	Range (identified	suggested that the product customization can
	as a CSA result)	reduce this problem by focusing on the spe-
		cific OEM customer needs (interview)
		Understanding the OEM customer processes
		in order to improve the OEM customer value
		creation (Best practice)
		3. Using Organizational networkedness to widen
		the case company offering to OEM customer
		(Best practice)

Table 10. Summary for improving the position related to limited product range.

As shown in Table 10, the limited product range can be improved by using product customization on specific customer needs. Understanding and improving the OEM customer value creation and using available resources from the network for widening the case company offering.

5.2.2 Offering

The weakness of the offering meaning in this context limited resources (section 3.6) compared to the selected preferred supplier for the pilot OEM customer. The offering was identified as a main weakness in the CSA stage. The results showed that the pilot OEM customer values the offering as an average priority in the selection of the possible new suppliers.

The case company is a family owned company having limited resources compared to the preferred supplier of the pilot OEM company. The case company has 400 people working in the company having a turnover of 100 million euro. Compared to the preferred supplier of the pilot OEM company having more than 10 thousand people working in the company and having a turnover of several billion euro.

In order to improve the case company competitive position the best practice revealed the understanding of the industrial networks (Håkansson and Johansson, 1992) as an answer for the weakness. The strategical development will be used to position the case company better in the network in order to have wider offering range compared to other potential suppliers of the pilot OEM company.

The case company will start co-operation with selected companies in order to secure own position and make the potential competitors business making more difficult. A co-operation could be started up with the biggest supplier of certain component in the market and asking to have the best prices for the components and in return give best prices for the case company components for the targeted company. The building up of the case company resources in the network by starting new partnerships with strategically selected companies in order to complete the offering of the components to the pilot OEM company. The case company is missing certain products from it is own product range and these missing products can be included in the offer by starting a co-operation with a selected company.

The interview with the case company key stakeholder had similar results, a partnership with a system integrator could be a help to widen the offering towards the pilot OEM customer. In general level at least, but not in this specific case. As the case company key stakeholder mentioned in the end of the interview: "let's offer the 40% what is possible from our product range and forget the rest". According to the informant, there is no need for a co-operation with other companies in this specific case.

The results of the proposal for improving the case company position related to limited resources can be seen in Table 11 below.

	Issue	Suggestions
1	Limited Re- sources (identi- fied as a CSA re- sult)	The key stakeholder of the case company suggested that partnership with system integrator can answer the problem of limited resources (interview) Building strategic partnerships with other companies in order to get advantage against competitors (Best practice) Ruilding as appretion with other companies.
		Building co-operation with other companies with limited resources in order to widen the
		offering (Best practice)

Table 11. Summary for improving the position related to limited resources.

As shown in Table 11, the limited resources can be improved by co-operating with similar companies with limited resources and combining them. Also strategic partnership with selected companies in order to get competitive advantage against competitors.

5.2.3 References

The weakness of the references meaning in this context low brand value (section 3.6) compared to the selected preferred supplier for the pilot OEM customer. The low brand value was identified as a main weakness in the CSA stage. The results showed that the pilot OEM customer values the brand value as a high priority in the selection of the possible new suppliers.

The case company does not have references available in the field of the pilot OEM company as the preferred supplier of the pilot OEM company has. The case company has good references from other industrial fields as the General Electric, Alstom Power and ABB in the electricity production field. Caterpillar from the mobile sector and several other major OEM companies.

In order to improve the case company competitive position, best practice suggests the customer reference marketing (Salminen and Jalkala, 2010) as an answer for the weakness. Existing customer references from other industrial field are the solution for the lack of references. By using existing positive and well known customers, there is a possibility to make status-transfer for the benefit of the case company. Thus, by using the existing global OEM companies' references, the case company can reduce the barrier of entry from the customer side. By showing them that other global OEM companies are working with the case company successfully. The status-transfer can also be done by using the previously mentioned companies as an evidence of passing supplier evaluation tests in previous cases. Thus, using the status-transfer will effect to improve the case company position.

The case company key stakeholder responded in the interview that this can be a positive way to approach the pilot OEM customer but in this specific case he would avoid it, and instead go with the existing strengths forward.

The results of the proposal for improving the case company position related to low brand value can be seen in Table 12 below.

	Issue	Suggestions
1	Low brand value (identified as a CSA result)	 The key stakeholder of the case company suggested that using existing global OEM customer names as references from other industrial sector could answer the problem of low brand value
		(interview) 2. Using status-transfer of the existing OEM companies to reduce the barrier for entry (Best practice)

3. Using existing global OEM customers as
evidence of previous successful passing
of supplier evaluation test (Best prac-
tice)

Table 12. Summary for improving the position related to low brand value.

As shown in Table 12, the low brand value can be improved by using statustransfer from existing global OEM companies. And by using them also as evidence of passing the supplier evaluation test previously.

5.3 Proposal Draft

The proposal draft is divided into two sections. The first section is discussing the journey of becoming a possible new supplier, and the second section giving out tools to improve the current case company position in regard to large OEMs.

5.3.1 Path to Becoming a New Supplier

The pilot OEM company has divided the path of becoming a possible new supplier to 4 steps that each of the supplier candidates have to fulfil before going forward in becoming a standard supplier (step 4). Each of the step requires approval from the pilot OEM side before a higher step can be reached. The supplier evaluation steps are shown in Figure 13 below.

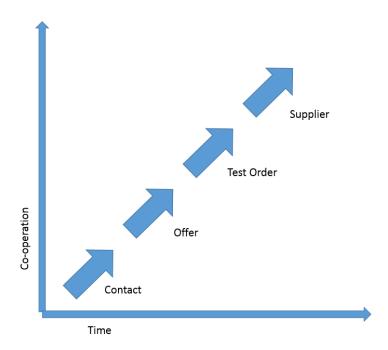


Figure 13. Supplier evaluation steps.

As shown in Figure 13, it requires four successful steps to become a standard supplier. The first step is a contact from an interested supplier who is willing to become a supplier for the pilot OEM company. Alternatively, this step can be used when the pilot OEM company is developing something new or replacing existing products, a contact can be taken also from the OEM side towards the possible new supplier. The second step after the contact has been taken is an evaluation of the supplier side general purchase conditions, price / quality issues, whether the supplier is global or local, does the supplier have references from the field, the continuance of the supplier company, possible supplier "interviews" and possible audit for the supplier company. The third step is to make a test order from the supplier. The test order can be an order to test delivery of the component from Place A to Place B. The test order can evaluate the complete delivery process including order confirmation, deliveries, invoicing and follow up of the product. The fourth step is to become a standard supplier and sign a contract with the pilot OEM company. There are several levels of suppliers for the pilot OEM company depending in the level of co-operation between the supplier and the pilot OEM company.

5.3.2 Initial Proposal for Improving the Case Company Competitive Position

In order to improve the competitive position of the case company with regard to the pilot OEM company it is necessary to adapt some of the above mentioned best practice. The case company has to have a clear picture of the pilot OEM customer processes in order to be able to offer not only existing solutions for the pilot OEM customer but to make relevant development suggestions which could lead to improving the customer current process as well as. The case company might think of engaging in a co-operation with local system integrator in order to offer complete solutions matching the pilot OEM requirements. The case company should evaluate using status-transfer of the existing global OEM companies to reduce the barrier of entry in front of the pilot OEM company. But most of all the case company should focus the efforts on the existing strengths of the case company. These are as mentioned before: selected components with high quality, very competitive prices, short delivery times enabling easy logistic planning, listening to the customer, fast decision making and product customization.

By discussing the suggestions from best practice with the vision from the main stakeholders from the parent company, the following steps can be proposed for improving the competitive position of the small supplier (the case company) in regard to large OEMs:

Current chal- lenge (identi- fied from CSA)	Proposed steps to tackle it	Current challenge (identified from CSA)	Proposed steps to tackle it	Current challenge (identified from CSA)	Proposed steps to tackle it
	1. Product customiza-	·	1. Partnership with a sys-		1. Using existing global OEM
(1) Limited	tion can reduce this	(2) Limited	tem integrator can answer	(3) Low	customer names as references
Product Range	problem by focusing	Resources	the problem of limited re-	brand value	from other industrial sector could
(identified as a	on the specific OEM	(identified	sources (main stakeholder	(identified	answer the problem of low brand
CSA result)	customer needs (main	as a CSA	interview)	as a CSA	value (main stakeholder interview)
	stakeholder interview)	result)		result)	
	2. Understanding the		2. Building strategic part-	_	2. Using status-transfer of the
	OEM customer pro-		nerships with other compa-		existing OEM companies to re-
	cesses in order to im-		nies in order to get ad-		duce the barrier for entry (Best
	prove the OEM cus-		vantage against competi-		practice)
	tomer value creation		tors (Best practice)		
	(Best practice)				
	3. Using organiza-		3. Building co-operation		3. Using existing global OEM
	tional networked-		with other companies		customers as evidence of previ-
	ness to widen the		with limited resources in		ous successful passing of sup-
	case company offer-		order to widen the offering		plier evaluation test (Best prac-
	ing to OEM customer		(Best practice)		tice)
	(Best practice)				

Table 13. Steps for improving the case company competitive position (in relation to three main current challenges).

6 Validation of the Proposal

This section discusses the proposed operations to improve the competitive position of the case company and whether they are valid. The outcome of this section will be a finalized proposal to improve the competitive position of the case company with regard to large OEM.

6.1 Overview of the Validation Stage

The aim of this validation stage is to test whether the co-created and improved first proposal would be successful enough to answer the pilot OEM company requirements for the startup of the co-operation between the case company and the pilot OEM company.

Validation of the proposal has been done through two qualitative interviews with another two key stakeholders of the case company. Both of the case company key stakeholders are having more than 20 years of experience working with OEM customers in different European countries.

The validation was done by representing the improved proposal of the case company operations and offerings to the case company two key stakeholders and comparing the results with the identified strengths of the preferred supplier of the pilot OEM company. In addition, the validation used some testing whether the improved position of the case company would reach the required requirements set by the pilot OEM customer. These results will give material for the validation of the proposal.

6.2 Findings of Data Collection 3

Findings from data collection 3 were gathered through two separate qualitative interviews with the key stakeholders of the case company. The key stakeholders were presented with the proposal for improving the case company operations and offerings, as well as presenting the identified strengths of the preferred supplier

of the pilot OEM company and comparing the results to find out whether the improved proposition would enable a startup of co-operation with the pilot OEM company.

6.2.1 Feedback from the Key Stakeholders

The improved proposal was presented to key stakeholders of the case company as well as the identified strengths of the preferred supplier of the case company. Both of the key stakeholders regarded the suggestions related to the improving position of the case company functional and good but not sufficient enough to convince the pilot OEM customer to start co-operation with the case company.

The long experience that both of the interviewed key stakeholders possess is related to doing active co-operation with several large OEM companies in Europe. It shows that the improved position of the case company is not sufficient enough to convince the large OEM companies to start co-operation with the case company on a larger scale. According to the interviewed key stakeholder:

"I think that in this specific case, the human factor is the key aspect. I mean, in front of this huge worldwide groups, we need to find alternative aspects, outside the normal and logic process, suitable to take at least a part of the business."

(Informant D)

Another reason for not being able to start co-operation with the pilot OEM company, according to the other interviewed key stakeholder, is the pilot OEM company "old" logic in use. According to the other interviewed key stakeholder:

"Means to not touch anything even if is proved that they are losing money, market share, still having technical problems of 30 years ago. Against this kind of mentality there aren't so much to do."

(Informant E)

The improved position of the case company, according to the key stakeholders, will be sufficient enough to start co-operation on a larger scale with small and medium OEM customers but not with large OEM customers.

As a summary of the feedback received from the case company key stakeholders, the proposed steps for improving position of the case company was seen as functional and providing the case company a better position to offer a wider range of operations and offerings. But nevertheless the resulting improved position of the case company was seen as not sufficient enough to engage co-operation to a larger scale with the pilot OEM customer. The resulting improved position of the case company was, however, seen as sufficient to start co-operation with small and medium companies on a larger scale.

6.3 Final Proposal

The final proposal is based on the co-created first proposal with the case company key stakeholder and suggested best practice. The proposal received limited approval and further suggestions from the validation stage because the key stakeholders could not see a larger scale co-operation possible with the pilot OEM company regardless of the resulting improved position of the case company.

The key stakeholders proposed using the existing strengths available for the case company compared to the preferred supplier of the case company. These included: (a) selected components with high quality, (b) very competitive prices, (c) short delivery times enabling easy logistic planning, (d) listening to the customer, (e) fast decision making and (f) fast product customization (as identified in CSA and confirmed in the validation stage). By using these existing strengths and combining then with the proposal from best practice and main stakeholder suggestions, there is a possibility for co-operation with the pilot OEM company for some part of the product range used by the pilot OEM customer.

In addition the personal opinion of the case company's Finnish representative is that, after months of profound and deep analysis of the case, the case company should focus on finding a reliable partner with existing long relationships of the OEM companies in the market and a local stock.

The summary table of the final proposal is shown in Table 14 below.

Current chal- lenge (identified from CSA)	Proposed steps to tackle it	Current chal- lenge (identi- fied from CSA)	Proposed steps to tackle it	Current chal- lenge (identi- fied from CSA)	Proposed steps to tackle it
(1) Limited Product Range	1. Product customiza- tion can reduce this problem by focusing on the specific OEM cus- tomer needs (main stakeholder interview)	(2) Limited Resources	Partnership with a system integrator can answer the problem of limited resources (main stakeholder interview)	(3) Low brand value	1. Using existing global OEM customer names as references from other industrial sector could answer the problem of low brand value (main stakeholder interview)
	2. Understanding the OEM customer processes in order to improve the OEM customer value creation (Best practice)		2. Building strategic partnerships with other companies in order to get advantage against competitors (Best practice)		2. Using status-transfer of the existing OEM companies to reduce the barrier for entry (Best practice)
	3. Using organiza- tional networkedness to widen the case com- pany offering to OEM customer (Best prac- tice)		3. Building co-operation with other companies with limited resources in order to widen the offering (Best practice)		3. Using existing global OEM customers as evidence of previous successful passing of supplier evaluation test (Best practice)
(4) Utilizing the		MPROVING THE		and TOWARDS (CO-OPERATION with OEMs:
existing strengths of the	(a) selected compone	ents with high qua	ality, (b) very competitive pr	rices, (c) short de	livery times enabling easy logistic
case company	planning, (d) lister	ning to the custom	ner, (e) fast decision making	gand (f) fast produ	uct customization
	- for co-operation with the	pilot OEM comp	any in some part of the prod	duct range used b	y the pilot OEM customer
(5) Finding a		FURTHER	SUGGESTIONS (from a Fir	nnish representati	ve)
reliable partner with existing	the case company should focus on finding a reliable partner with existing long relationships with the OEM companies in the				
relationships with OEMs	market and a local stock		ay competitive position in re		

Table 14. Final Proposal for improving the case company competitive position in regard to OEMs.

As shown in Table 14, the initial proposal includes suggestions identified in the CF section and also the co-created suggestions with the case company key stakeholder. Table 14 also shows the final suggestions from the validation stage how to support the initial proposal with the case company existing strengths. It also includes the personal opinion of the case company's Finnish representative based on his long-term experience in dealing with these challenges.

By combining these improvement efforts, the case company will strengthen its competitive position and eventually make it possible for a wider scale co-operation with the pilot OEM company.

7 Discussion and Conclusions

This final section discusses the target and outcome of the study. It gives recommendations what to consider in the future cases when trying to open and activate co-operation with large OEM customers. Finally, the reliability and validity of the study are evaluated.

7.1 Summary

The aim of the thesis was to create a proposal to enlarge the business activities of a small company so that to partner with large OEM companies. The objective has been met on a theoretical basis. The final proposal co-created with the case company key stakeholders gives sufficient tools for engaging in a co-operation with a large OEM companies. The starting of a co-operation with a large OEM will take a long time and therefore cannot be verified in the time frame if this Thesis.

The necessity for the proposal come from the lack of resources to comply with the requirements of the large OEMs in Finland. The heavy requirements from the OEMs side had been close to impossible to fulfil by a small player and therefore it was essential to improve the case company operations and offerings and to evaluate a partnership in order to fulfill the requirements.

The selected research approach for the thesis was a qualitative case study. The study started with a current state analyses of the case company. The CSA produced 5 outcomes. The first outcome was the identified basic requirements of the pilot OEM company for starting a co-operation. The second outcome was the identified existing and missing parts in the offering and operations of the case company in relation to the requirements set by the pilot OEM company. The third outcome was the identified the case company's current market position against the preferred supplier. The fourth outcome was to revise and back up the findings of the interviews with the pilot OEM company as well as the key customer interviews, by using own observations during five year period of meetings and negotiations with the pilot OEM company. The fifth outcome was the discussion and understanding of the case company existing and missing attributes.

The results of the current state analyses identified the strength and weaknesses of the case company operations and offerings. The weaknesses were used to pin point the areas where to look answers from the best practice in the available literature. The best practice from the literature revealed answers to weaknesses identified in the CSA section. The best practice search produced three outcomes. The first outcome was solution business model framework that suggested answers to limitations in Product Development. The second outcome was how to understand industrial networks that was giving answers to limitations in the Offering. The third outcome was how to use customer reference marketing that was giving answers to limitation in References. These three outcomes than formed the conceptual framework of the study.

The identified strengths of the case company from the CSA section and the conceptual framework was used for co-creating the first proposal. The proposal was co-created together with the case company key stakeholder who was having long experience with working together with large OEM customers. The aim of the first proposal was to build up a proposal that would improve the case company competitive position with regard to large OEMs, and the pilot OEM customer in particular.

The proposal was then validated with two other key stakeholders of the case company. In general the improved position of the case company was seen as functional and providing the case company with a better position to offer a wider range of operations and offerings. But nevertheless the resulting improved position of the case company was evaluated as not sufficient enough to engage in co-operation on a larger scale with the pilot OEM customer. As an outcome of the validation, additional suggestions were made to build the final proposal for the case company in order to improve the competitive position with regard to large OEMs. The final proposal includes best practice identified in the conceptual framework of the study, the existing strengths of the case company and the personal opinion of the case company local representative.

7.2 Practical Implications

The proposal created in this study proposes steps for the case company to expand it is operations and offerings to match the requirements set by the large

OEM customers. The proposed steps are general and functional but not all of the case company key stakeholders see them as an answer for engaging in business activity with the pilot and other large OEM customers. Therefore there will be further discussions related to the matter in the future. But since the case company local sales representative has full control of it is own activity in Finland, he will use the proposed steps as he sees them best fitting each single opportunity in the future. Therefore parts of the final proposal will be implemented immediately.

As for future, the case company local representative should continue investigating more thoroughly to the options related to local stock and stronger local partner with long experience with the large OEM customers in Finland.

7.3 Evaluation of the Thesis

This section evaluates how the outcome of the thesis corresponds to the set target of the study, as well as how reliable and valid the study is.

7.3.1 Outcome vs Objective

The main objective of this thesis was to build a proposal to enlarge the business activities of a small company so that to partner with large OEM companies. The outcome was a proposal that made suggestions how to improve the case company position by using servitization, networking and using existing customer references in the field where there are few or none existing. The proposal also suggests using the existing strengths of the case company. The objective on a general level can be considered fulfilled with this proposal as discussed earlier in the beginning of chapter 7.1.

7.3.2 Reliability and Validity

The reliability and validity of this study has been ensured by following the plan defined in Section 2.4. The data collection was descripted in detail in Section 2.3.

The validity of the study focuses on demonstrating that a research indeed measures what was stated to be measured and whether the results of research

could be applied to other contexts or situations and to what extent this may be possible.

Reliability focuses on "whether the same findings would be obtained if the research were repeated, or if someone else conducted it" (Quinton & Smallbone, 129). Reliability of this study was planned to be further ensured by using triangulation in the data collection. In this study, data was collected from interviews of the pilot company, from external consultant, from case company employees, from competitor benchmarking and from participant observations by the researcher gathered during the five year time of working in this industry. The interviews were analysed, coded and used as field notes. The gathered data was reviewed by the key stake-holders.

The qualitative case study was selected as the research approach because it is the most suitable approach for understanding the strength and weaknesses of the case company, identifying the missing products and services required for a partnership, and providing a solution for engaging in business activity with the large OEM.

The key stakeholder and customer interviews were excluded from this thesis on purpose. In order to receive truthful, reliable and accurate information from the interviews the identity of the participants had to be concealed.

The current state analyses had a fairly good number of interviewees in Data 1. This was giving a fairly good basis to identify the strength and weaknesses of the case company and the preferred supplier of the pilot OEM customer. As well as to find out the requirements set for the co-operation from the pilot OEM side. To ensure the validity and consistency of the current state analyses findings they were compared to the own observations from five years of time. The co-creation of the proposal could have had additional suggestions for improvements if there were other key stakeholders available. The validation part of this study had limitations because it could not been done with the pilot OEM company interviewees. But instead with the case company Italian key stakeholders. Therefore the validation part could have been more precise in other circumstances.

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Appendix 1: Interview question for the pilot OEM company

TOPIC: Improving the Competitive Position of a Small Supplier with regard to Large OEMs

Information about the informant (Interview 1)

Table 1

Details	
Name (code) of the inform-	Person X
ant	
Position in the case com-	Management Level
pany	
Date of the interview	
Duration of the interview	
Document	Field notes

Field notes (Interview 1)

Table 2

	Topic(s) of the inter- view	QUESTIONS	FIELD NOTES
1	Starting point: the inter- viewee de- scribes his/her ex- perience in view of the topic/prob- lem	How have you been involved in supplier evaluation processes? How long time? How does supplier evaluation decisions impact your work? Please give an example of how supplier evaluation process takes place?	
2	Identify strengths/p roblems	How do you see the case company supplier evaluation process so far? If you feel it was successful, what were the reasons?	

		If you feel it was not successful, what were the reasons?	
3	Key concerns	What would be your key concerns about co-oper- ating with the case com- pany? Why?	
4	Analysis	In which areas do you think there is space for improvement? In what way? How could that be done?	
5	Best practice	Do you have some guidelines of how to do it? What best practice do you think that the case company should follow in order to be selected as a supplier?	
6	Developmen t needs	How could the case company avoid the prob- lems in case of the next supplier evaluation?	