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Managing Transfer Projects in an Offshore Strategy

Swedish and Chinese perspectives

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Product and process development
Production and Logistics

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Abstract

Offshoring concerns the relocation or a transfer of a company's business activities to another country. When a company decides to offshore their business to another location it involves the transfer of products and knowledge which are both key activities in transfer projects. In today's globalization it is difficult for companies to stay competitive in the marketplace. For this reason it is becoming more common that companies offshore parts of their business and opening affiliates abroad for the production of goods or services. It is challenging to transfer a product from one site to one other since the receiving site might not have been involved in the product development process from the beginning and therefore have limited associations to the product. The transfer of competence and knowledge but also different ways of working are some of the factors that needs to be successfully managed. This makes it especially challenging when considering cultural and geographical together with the temporal distance between the sites. It is difficult for companies to maintain a sourcing strategy that is cohesive and many companies therefor fails to manage a successful relationship with their offshore partners. The purpose with this study was to present a framework that would support the transfer process when aiming for parallel production. This was to include the features needed to be developed in order to manage the most important factors in the transfer process.

In order to answer the research questions a case study with a qualitative research method was performed. Interviews in Sweden and China including 34 respondents were performed in order to identify the transfer process. The approach was a qualitative interview with a guided conversation with the emphasis on the authors asking questions and listening, and the respondent answering. The respondents was seen as meaning makers rather than passive channels for retrieving the data needed. The purpose was to derive interpretations rather than facts or laws. Each interview was conducted between three people including the two authors and one respondent.

The findings indicate that the organization needs to improve their knowledge transfer process. The organization also needs to develop similar processes for the activities involved in the transfer process in order to perceive the same quality. The analysis of the qualitative findings resulted in a framework including six important factors for a successful transfer project. Following factors should be taken in consideration by the company to achieve a successful transfer project: identification of knowledge carriers, set up a transfer core-team, empowering knowledge sharing, the use of a personalized strategy, the development of similar processes and improve the common perception of quality.

Keywords: Chinese Culture, Knowledge Transfer, Knowledge Management, Transfer Project, Project Management, Offshore

Sammanfattning

Offshoring innebär att ett företag omlokaliserar eller transfererar delar av sin verksam till ett annat land. När ett företag beslutar sig för att utveckla sin verksamhet till en offshoreverksamhet involverar det transfering av produkter och kunskap vilka också är nyckelaktiviteter inom ett transfer projekt. Dagens globalisering gör det svårt för företag att förbli konkurrenskraftiga på marknaden. På grund av detta blir det mer förekommande att företag jobbar med en offshoreverksamhet där delar av företaget förflyttas till andra länder och där öppnar upp fabriker med produktion av service och varor. Det är en utmaning att transferera en produkt från en plats till en annan då mottagaren inte varit involverad från start i produktutvecklingsprocessen och därmed har en begränsad association till produkten. Transfering av kompetens och kunskap men även olika sätt att arbeta är faktorer som måste kunna hanteras på ett framgångsrikt sätt. Detta gör det särskilt utmanande när man överväger de kulturella och geografiska tillsammans med det tidsmässiga avstånden mellan platserna. Det är svårt för företagen att upprätthålla en sourcingstrategi som är sammanhängande och därför misslyckas många företag med att hantera en framgångsrik relation med sina offshore partners. Syftet med denna studie var att presentera ett ramverk som skulle stödja transferingsprocessen vid parallellproduktion. Detta inkluderar de funktioner som behöver utvecklas för att hantera de viktigaste faktorerna i en transferingsprocess.

För att besvara frågeställningar utfördes en fallstudie med en kvalitativ forskningsmetod. Intervjuer utfördes med totalt 34 respondenter i Sverige och Kina för att identifiera transferingsprocessen. Tillvägagångssättet var en kvalitativ intervjustudie med guidade samtal där författarna ställde frågor och lyssnade, och respondenten svarade. Respondenterna sågs som beslutsfattare snarare än passiva kanaler för att hämta de uppgifter som behövdes. Syftet var att få fram tolkningar snarare än fakta eller lagar. Varje intervju genomfördes mellan tre personer, vilket inkluderade de två författarna tillsammans med respondenten.

Resultatet visade att företaget behöver förbättra sin kunskapsöverföring. Företaget måste också utveckla likadana processer för de aktiviteter som ingår i transferingsprocessen för att uppnå samma kvalitet. Utifrån analysen av de kvalitativa resultaten skapades ett ramverk med sex viktiga faktorer för en lyckad transferingsprocess. Följande faktorer bör tas i beaktan av företaget för att nå en framgångsrik transferingsprocess: identifiera kunskapsbärare, upprätta ett transferings team, arbeta med kunskapsöverföringen, tillämpandet av en personlighetes strategi, utveckla likadana processer och förbättra den gemensamma uppfattningen om kvalitet.

Nyckelord: Kinesisk kultur, Kunskapsöverföring, Kunskapshantering, Transfer Projekt, Projektledning, Offshore

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Emma Adolfsson & Peder Lindgren

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Abbreviations

BOM	Bill of Material
CE-marking	Conformité Européene marking
ECO	Engineering Change Order
ERP	Enterprise Resource Planning
PM	Project Manager
R&D	Research & Development
SAP	Systems Applications Products
SCM	Supply Chain Manager
SU	Supply Unit
WI	Work Instructions

1. Introduction

This chapter present the background, problem formulation, the objectives and the deliberations of the thesis.

1.1. Background

The globalization makes it difficult for companies to stay competitive in the marketplace. For this reason it is becoming more common that companies offshore parts of their business to low cost countries, opening affiliates abroad for the production of goods or services (Mefford, 2010; Kirkegaard, 2007). Companies should evaluate the dynamic perspective when choosing the new location for their offshore, taking into account important location factors such as assimilation of wages and prices abroad, realistic timeframes for the ramp-up and additional support cost for securing the reliability and quality of the foreign production location (Van Eenennaam & Brouthers, 1996; Meijboom & Vos, 1997). Companies should not only base their offshoring decision on comparisons of labour costs, but unfortunately this is how it usually is in practice (Kinkel & Maloca, 2009). It can be challenging for companies to choose the right offshore location since different locations have advantages and disadvantages that are unique in its own way (Vestring et al., 2005). While one location site can offer a low labor cost but less good infrastructure, another location may offer a qualified pool of workers and a decent infrastructure (Roztocki & Fjermestad, 2005).

Today offshoring and outsourcing with subcontracting and non-affiliated firm for production of the same goods or services (Kirkegaard, 2007), has developed from standardized activities that are driven by cost savings to activities such as product design, product development, research and engineering (Baden-Fuller et al., 2000; Lewin et al., 2009; Lewin and Cuoto, 2006). One other strategic driver behind offshoring is to accessing highly skilled and educated workforce around the world (Bunyaratavej et al., 2007) that are able to develop new products or adapting the ones that already exist when entering new markets. Therefore the strategic decision might be to offshore product development activities, or a part of it to countries that possesses a qualified workforce (Manning et al., 2008; Fixler & Siegel, 1999; Barthelemy & Geyer, 2001; Bahli & Rivard, 2005). Other important motives for companies to move production activities abroad are to opening up new markets, get closer to key customer and markets, reduced cost, access foreign distribution channels, ability to supply local, access goods and materials, follow the investors, new technologies, focus on core business activities, increase strategic flexibility, and other factors as culture and language diversity, quality of infrastructure and institutional settings (Kotabe, 2015; Hollenstein, 2005; MacCarthy & Atthirawong, 2003; Smolarski & Wilner, 2005; Dunning, 1988; Massini et al., 2010; Dachs et al., 2006). The firm get a reputation and legitimacy with opinion makers, government and local customers by locating a function that is critical in an important foreign market (Contractor et al., 2010). It becomes clear that many factors may ultimately determine the success or failure of an offshore decision. The competence to build and share the same organizational culture, blend the best practices with home office mandates in managing human resources and the ability to transfer best practises across locations are all crucial components of offshoring success (Youngdahl &

Ramaswamy, 2008). Project management has today become a key activity in most modern organisations and projects generally possess limited budgets, scheduling, and other complex and interrelated activities (Belout & Gauvreau, 2004). When a company decides to offshore their business to another location it involves the transfer of products and knowledge, this is referred as transfer projects.

1.2. Problem formulation

It is difficult for companies to maintain a sourcing strategy that is cohesive and many companies therefor fails to manage a successful relationship with their offshore partners (Youngdahl et al., 2008). Offshoring can lead to long lead times, poor quality, high level of inventories, slow response, control and coordination problems (Mefford, 2010). One challenge with offshoring is the communication between employees at the domestic location and the offshored location (Jensen et al., 2013) . Employees at geographically spread locations with different language and culture have to rely on technology based coordination mechanisms that is less superior instead of being coordinated face to face by the domestic location (Storper & Venables, 2004; Jensen et al., 2013). One other challenge is the ownership and the coordination of the offshored activities but also the overall consistency of the globally organizational system (Hutzschenreuter et al., 2011). The cultural and the geographic distance between the domestic location and the offshored location affect the coordination, knowledge transfer and the control in the organization (Dibbern et al., 2008). In order to avoid these problems a firm is required to apply mechanisms that can reduce the distance within the organization (Kumar et al., 2009).

The cross-border transactions by organisations have increased over the past years because of the globalisation, and it is crucial to understand the international knowledge transfer when transferring operations across national and cultural boundaries (Javidan et al., 2005). It is difficult to transfer organisations from one environment to another thus the organisations are closely tied to their environment. Organisations tend to adapt and take on characteristics of the new surrounding environment and will sometimes alter the environment in line with their own needs (Florida & Kenney, 2000). It is challenging to transfer a product from one site to one other since the receiving site might not have been involved in the product development process from the beginning and therefore have limited associations to the product. Transferring competence, knowledge and different ways of working are other hinders to cross. This makes it especially challenging because of the cultural, geographical and temporal distance between the sites (Wohlin, 2011). The barriers associated with geographical, physical, culture or temporal dispersion has been largely concord by the on-going technological revolution. This change of nature of work has created a major shift in the way work traditionally has been done (Kedia & Mukherjee, 2009). Due to culture differences, lack of infrastructure, hidden costs in transferring products and knowledge, transfer projects will always be present and play a crucial role in the success of the business.

1.3. Aim and research questions

The scope of the thesis was to develop a framework that will support transfer projects between two plants that is aiming for parallel production with the same processes and quality of products. Three research questions have been formulated in order to fulfil the aim of the research:

RQ1:
What important factors are to be considered when transferring a project from one plant to another when aiming for parallel production?

RQ2:
What features should a framework supporting transfer projects include?

RQ3:
How can a company work to ensure that such a framework is being followed after implementation?

1.4. Project limitations

The work has been conducted over a 20-week period including theoretical studies and academically responsibilities, company visits and qualitative interviews at both the Swedish and the Chinese unit. This research has several limitations. First, the scope of the research is limited to manufacturing companies that produce complex products such as robots or equal products on a large scale. This is further limited to companies that have a global organizational structure.

The scope is also limited to transfer projects in general. Further limitations to only the Supply Unit (SU) who has the responsibility of production and logistics is done and other units such as Research & Development (R&D) and sales unit are therefore neglected, this can be viewed in figure 1. The case study has been carried out between two sites of the same company both in Sweden and China to get a balanced view of how transfer project is being perceived, managed and executed. The domestic plant is located in Västerås, Sweden since many years back and the offshore plant is located and has been operative in China since 2005.

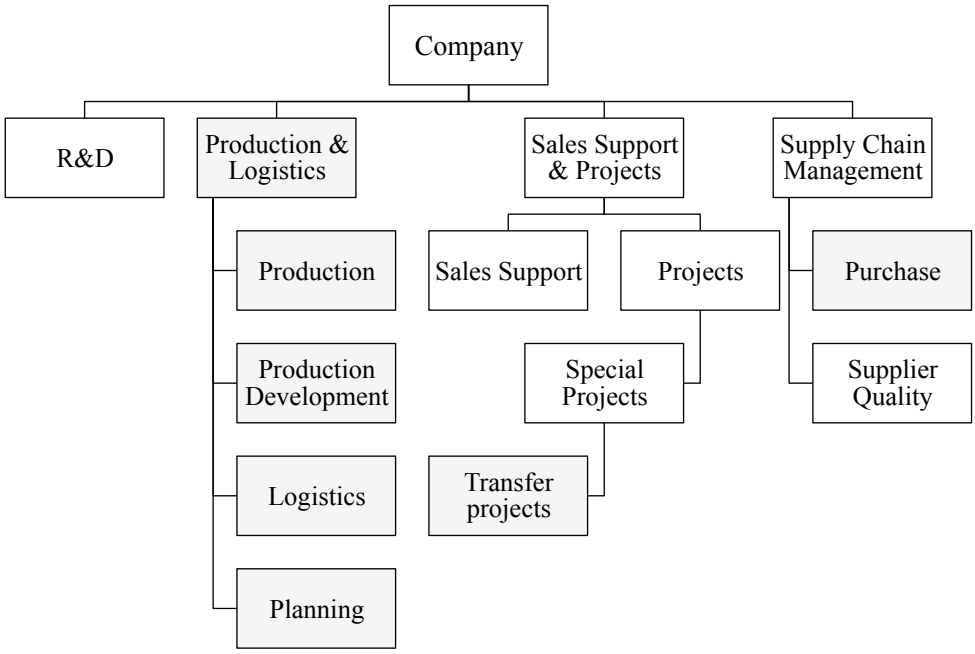


Figure 1 – The limitations of the research

2. Research Methodology

This chapter describes the methodology behind the research process, from the research design and its process, the techniques used for collecting the data to the analysis of the data and the quality of this research.

2.1. Research design

Writing a quality case study report is a final closure over the results and conclusions drawn from the research and is a demanding task. For that reason the authors started writing on the method as well as the literature review in the early phases of the research (Yin, 2006). There are two ways of conducting a qualitative research; one way is to "create the research questions first" and the other way is "fieldwork first". In this case study the authors selected the case and the aim of the research first and then executed the fieldwork before formulating the research questions. In order to reach the goal of the research it is important to have a good set of research questions in an early stage to make sure that measurements and necessary steps that need to be taken can be achieved in the research process. It helps to delimit the research and plan the literature studies that are necessary. A good set of research questions will evolve over time after the theme of the research have been considered and reconsidered. This was something that the authors experienced in this case study (Yin, 2006; Maxwell, 2013).

2.2. Qualitative research process

The model used in this research as a frame of reference for a qualitative research process is illustrated in figure 2. The way the research process actually was performed is illustrated in figure 3. As illustrated in figure 3, the data collection and analyze of the data was performed in two steps. The first step was performed in Sweden while the second step was performed in China. No hypothesis was formulated only research questions. The amount of time spent in each country can be divided by 1/5 in Sweden and 4/5 in China.

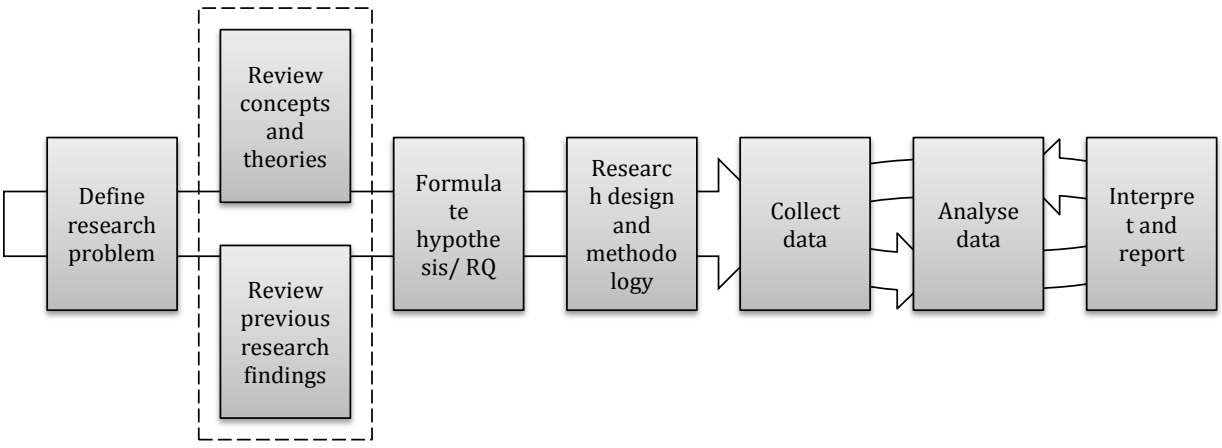


Figure 2 - Qualitative research model

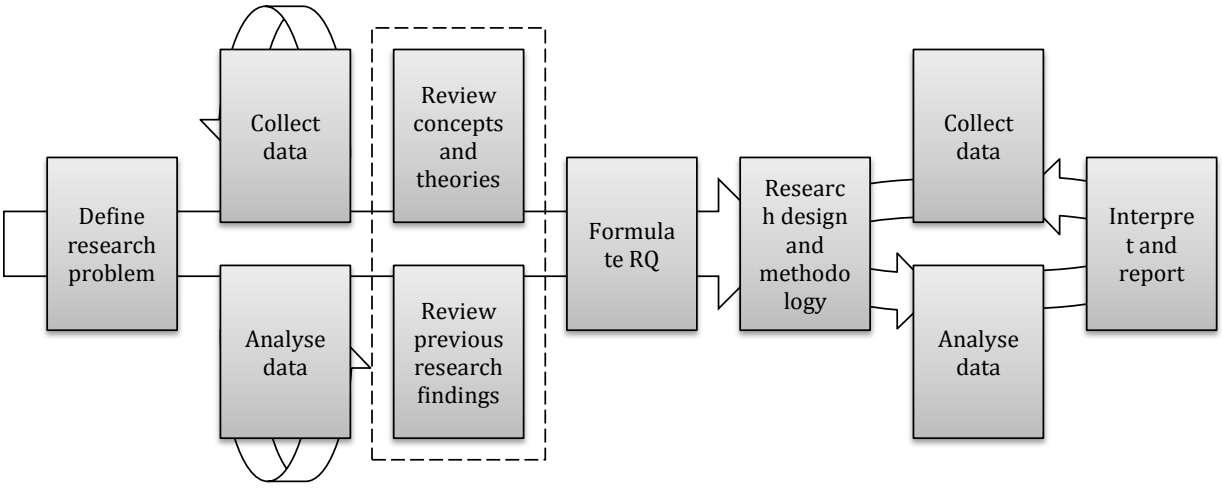


Figure 3 - Research process

Since qualitative research aims to capture the circumstances that exist in real life and gather the perspective of the people living in it, the gathering of the data started early in the project. Yin (2006) describes three benefits from an early fieldwork. The first is getting the knowledge if the research problem is too broad and has to be delimited or redirected, the second is methodological e.g. if the people in the process has the availability to participate and are as informative as you have expected, and the third is to get the relative perspectives e.g. how the people in the process perceive their world and activities (Yin, 2006).

The research started out with a central idea that the underlying processes and management was to be investigated as the objective of this research was to study how transfer projects in a global company with the aim of parallel manufacturing is best being implemented. The structure was not planned in advance and evolved over time (Yin, 2006). The research design had to be an exploratory approach with a collection of qualitative data since knowledge regarding the problem area was not fully known by the authors (Patel & Tebelius, 1987). The main goal was to capture the words and perceptions of the respondents who all were involved in transfer projects (Gubrium & Holstein, 2002).

Since a qualitative research is a dynamic process of collecting and analysing data that evolves over time the authors worked dynamically which evolved in new questions being formulated and new people to interview. Usually the authors didn't know what questions to ask and which person to interview or what to observe if the information wasn't analyzed as it evolved. This didn't mean that the data gathered was analyzed and finished as the process was over, it just enter another more intense stage in the process (Merriam, 1988). The author's values and experiences of the process played a key role in getting the right information needed. Since one of the authors had earlier experience from employment and was familiar with corporate concepts and organizational structure this prevented the authors to get hindered on these issues. This increased the chance of getting the right information needed and interpreting the data gathered. This inner-perspective is a base for interpreting the data gathered (Patel & Tebelius, 1987).

2.3. Case study research

The possibility of using a mix of methods when collecting the data gives the case study its strength when compared to other methods such as surveys and historical methods and is also why the authors chose the case study as research method (Merriam, 1988). During the case study the authors was faced with decisions and made choices from different alternatives and judgments based on time, availability of the respondents and the research problem. When the problem formulation was defined, the case was selected and delimited based on the resources available for the research. The authors then determined the data required for the problem to be highlighted and decided to use the interview method as a base for the research with complementary observations and documentations (Merriam, 1988). Yin (2006) describes what skills that are necessary to have when conducting a good case study, which also summarize how this case study was performed. The authors must be able to formulate good questions and interpret the answers in the correct way, be a good listener and don't let his or hers own preconceptions and ideological beliefs be in the way, be flexible and able to adapt to new situations and see opportunities instead of obstacles, have a clear understanding of the issues being studied and not be controlled by distorted perceptions derived from different theories of various kinds.

2.4. Presentation of case study company

The company is a part of a larger and global organisation structure and a manufacturer of complex products for the manufacturing industry. Until 2005 the company was only located in Västerås, Sweden, and had a smaller manufacturing plant in Bryne, Norway. In 2005 the company made the strategic decision to level down the manufacturing in Norway and offshore their business to Shanghai, China. A transfer manager has the responsible to plan and to allocate resources between the sending and receiving plant. Since 2005 the majority of products has been transferred from Västerås to Shanghai in approximately a dozen products. In recent years the R&D in Shanghai has developed three robots whereas two have been transferred to Västerås and one is on-going. In 2011 there was a strategic decision to produce products in parallel between Sweden and China, which automatically led to products being transferred. Recently there has also been a strategic decision to offshore the business to USA. The company is becoming more global which generates a need to manage transfer projects with state of the art execution.

2.5. Data collection techniques

The information that was gathered in this research was collected through interviews, observations and documentation. The strategy behind this is called triangulation and its strength lies in the combination of these methods (Merriam, 1988).

Interview

The interview is the most common method for obtaining data and was also used in this research. The interview was conducted between three people, the two authors and the respondent (Merriam, 1988). The approach used was a qualitative interview with a guided

conversation with the emphasis on the authors asking questions and listening, and the respondent answering. The respondent was seen as meaning makers rather than passive channels for retrieving the data needed. The purpose was to derive interpretations rather than facts or laws (Gubrium & Holstein, 2002). When gathering data through interviews, one very important step is to target and select the significant respondents. The authors started by asking a key stakeholder who knew which respondents that possessed the relevant knowledge and data necessary for the research, in this case the manager who is responsible for production and logistics. This resulted in a total of 13 initial respondents in Sweden within the SU being suggested (Merriam, 1988). The authors used the snowball effect where the selected respondents helped to locate new important people through their networks (Gubrium & Holstein, 2002). When contacting the respondent a letter of introduction was attached in the invitation. In this case the invitation or request was sent by e-mail through the manager receptionist who explained who the authors were. The letter of introduction was formulated with a short presentation of the authors, the purpose with the research and explanation why the respondent was chosen (Yin, 2006).

The authors tried to act open and honest in the interviews to establish trust with the respondents. Since the case study was conducted in two different countries with different cultures the cross-culture phenomena played an important aspect in the research. Establishing trust is difficult enough between people in the same culture and even more difficult in a cross-culture. To overcome this situation the authors always tried to establish a trust with significant people in the context in which the research were conducted (Gubrium & Holstein, 2002). The motivation is important to establish with the respondent in an interview. The way the authors tried to stimulate this motivation was to let the respondents talk about what they felt rewarding and was in their interest considering the topic and as soon as the respondent was getting off track, the authors led him or her in the right direction again. The authors also used a method called probing during the interviews that is a technique that aims to get more information and let the respondent talk without being interrupt (Patel & Tebelius, 1987).

The interviews were guided by a number of questions and issues that was discussed, the actual order in which the main questions was answered or issues being discussed did not really matter, see Appendix 1 & 2. This kind of open less structured interviews makes it easier for the authors to adjust the situation and obtain the relevant data as the interview progress (Merriam, 1988). When the authors formulated questions, the arrangement was to begin and end the interview with neutral questions and with the main questions in the middle. This was carried out in a way that the respondent would get the background variables necessary for understanding the research problem, but also gave a chance for the respondent to add additional questions that he or she felt were important for the research (Patel & Tebelius, 1987). The interviews can be divided into questions regarding transfer projects in general and questions regarding the on-going transfer project. The questions regarding transfer projects in general were carried out with the general management. The question regarding the on-going transfer project was carried out with the project management and staff at operational level.

In total, 34 interviews was carried out in Sweden and China with key stakeholders at all levels in transfer projects; general management, project management and at operational level, see table 1. The interviews are divided 25 in Sweden and 9 in China. More interviews were carried out in Sweden than in China since the Swedish unit were the outsourcer and the place where transfer projects is being managed from and also the place where the problem definition for the thesis was carried out.

Table 1. Interview respondents

Interview respondent	Department	Unit	No
Transfer in general			
Supply Chain Manager	Supply Chain	SE	1
Strategic Purchase Manager	Supply Chain	SE	1
Strategic Purchase Project Manager	Supply Chain	SE	2
Trainee	Supply Chain	SE	1
Production Engineering Manager	Production	SE	1
Production Engineering Project Manager	Production	SE	2
Production Engineer	Production	SE	1
Production Engineer Consultant	Production	SE	1
Trainee	Production	SE	1
Production Planning Manager	Planning	SE	1
Production Planner	Planning	SE	1
Operations Excellence Manager	Supply Unit	SE	1
Global Project Manager	Supply Unit	SE	1
Transfer Project Manager	Supply Unit	SE	1
Supply Chain Manager	Supply Chain	CN	1
Strategic Purchase Project Manager	Supply Chain	CN	1
Production Engineering Manager	Production	CN	1
Production Engineer Project Manager	Production	CN	1
Production Planning Manager	Production	CN	1
Ongoing transfer project			
Sales Manager	Sales	SE	1
Senior Engineer	R&D	SE	1
Production Engineer Project Manager	Production	SE	1
Production Planner	Planning	SE	2
Production Technicians	Production	SE	2
Operators	Production	SE	2
Strategic Purchase Project Manager	Supply Chain	CN	1
Production Technicians	Production	CN	1
Operator	Production	CN	2
Total of interview respondents			*34*

The interview questions varied depending if the respondent was involved in the on-going transfer project or in transfer in general but also depending on the respondent. The authors tried to have the same topics being discussed in each step in the interview process both in Sweden and China.

Topics- interview process:

- Introduction & basic questions, see Appendix 1
- Main questions- Transfer in general, see Appendix 1
- Main questions- On-going transfer project, see Appendix 2
- Other- Additional questions, see Appendix 2

An active listener is important during an interview but it doesn't mean that silence is a bad thing. The authors waited a few minutes extra before breaking the silence during the interviews to prevent that important information didn't get lost and to give the respondent time for reflection and possibility for adding additional information (Ruane, 2006). The cross- culture communication is a challenging aspect when it comes to breaks and silence during an interview and this was taken into consideration especially when conducting interviews in China. Especially in some Asian cultures silence and pauses is seen as an active part in the communication. Also the nonverbal communication like physical expressions shouldn't be ignored during a cross-culture interview (Gubrium & Holstein, 2002).

All the interviews were recorded after approval from the respondents. The recording were conducted by a computer in Microsoft's words notes that made the actual tape-recorder invisible and not noticeable since the computer was recording instantly by one tap on the mouse (Gubrium & Holstein, 2002; Ruane, 2006). Notes were taken and transcriptions were made besides recording. The flaws are eventual uncertainty or reluctance from the respondent to be interviewed but this usually decreases during the interview and eventually gets forgotten which is also what the authors experienced (Merriam, 1988). One of the biggest disadvantages with recording an interview is that it takes about 4-6 hours of transcript for 1 hour of recording. The transcription was made faster since there are certain benefits from the program such as orientate in the document while listening to the recordings (Patel & Tebelius, 1987).

Documentation and Observation

In this case study documentation is meant as information gathered or given to the authors in written form and not something that the authors have documented themselves during the research (Patel & Tebelius, 1987). The documentation served mainly as a base for improving the author's knowledge in the subject and understanding the context of transfer projects. The documentation used in this research can be categorized in corporate documentation and project documentation. The corporate documentation was information such as organizational structure, values, strategies, goals and processes provided mainly through the internal intranet via computer. The project documentation was information provided by the respondents such as information about transfer project, emails, pictures and internal project folders via computer on the corporate servers. Observation can be used as a method for different purposes but the most common use is for the exploratory case study. One of the greatest benefits with observations compared to interviews is the chance for the authors to study the research problem as it evolves. Another benefit is that the respondent find it easier to explain certain processes, feels more relaxed and open with his or her thoughts when being in his or her real element when compared to an interview. There are two types of observations, the structured and unstructured observation. The exploratory unstructured observation method was used at both plants in this case study. This was carried out together with production managers at both plants as they explained the process in the production. This method is often used when the authors needs to collect as much information about a research problem as possible (Patel & Tebelius, 1987). Observation is not always about what is being seen it can also be informal observations such as listening and making conversations. The authors did informal observations when visiting the

company during lunch, breaks and at random coincident when talking to people at the company (Ruane, 2006). Other observations made during the case study were company factory layouts and workplaces at both plants (Yin, 2006). The authors did also direct observations on the Chinese culture both in a work and social context, as they lived in China for 20 weeks.

Literature review

The purpose of the literature review in this research was to broaden the author's knowledge in the specific research area of offshore activities and transfer projects. It provided the authors with the results and conclusions on what other authors already had found and how they had done so. Since the authors had difficulties finding scientific papers that was only dedicated to the specific research topic "transfer projects" the authors had to find other scientific papers that had similarities. The authors found out that much was written in the topic of offshore activities and that transfer project is a key element in this activity. Therefore, the literature review was concentrated on these research papers and journals. Following keywords were used when searching for scientific papers: "offshoring", "offshoring production", "transfer projects", "knowledge transfer", "knowledge management", "project management", "cultural differences" and "Chinese culture". The search was carried out on the databases Google Scholar, Emerald Insight and Discovery. Further literature was obtained from the university's supervisor and the snowball effect was used when finding an interesting paper, the references in that paper were also used. A literature review helps to create legitimacy and authority to the research, clarifying the contributions that has already been made and helps to constrain the research to a reasonable scope (Karlsson, 2009).

2.6. Technique for analysing data

The technique for analysing the data was straightforward and comprised of comparing the theory from the literature review with the data collected in the case study.

Subjects of interested for the research:

- Involvement and responsibilities of interview respondents
- Transfer process
- Critical susses factors, cooperation and communication
- Evaluation process
- Project plan Overall Execution
- Project management
- Improvement proposals
- Cross- culture

The authors analyzed the collected data without any predetermined opinions (Yin, 2006; Patel & Tebelius, 1987). The authors was predetermined in the nonverbal communication like bodily expressions and had to read between the lines during some of the interviews, especially conducted in China since cultural differences exists compared to the West (Gubrium & Holstein, 2002). Qualitative research is not a linear process but a process that needs to be done

in parallel through the entire research. In the early stage and also while being conducted the authors analyzed each interview that lead to hypotheses being revised and fine-tuned (Merriam, 1988). Transcription is necessary to find the right information needed and was carried out only when the authors felt that important information regarding transfer projects was being discussed (Gubrium & Holstein, 2002).

2.7. Quality of research

The quality of a research is determined by its validity and reliability. The validity is determined by the ability to ensure that the aim of the research is really what is being studied. The reliability is determined by the ability to ensure that the results would be the same if the study was repeated (Patel & Tebelius, 1987).

Validity

To ensure the validity in this research the authors started with the fieldwork that later generated the problem definition and a set of research questions. This led to a clearly defined goal of the research. This stretched the validity of the research in the way that the authors knew what data to collect (Yin 2006; Maxwell, 2013). In order to ensure the significant respondents and the right data being gathered, the authors together with the responsible managers over the production and logistics both in Sweden and China determined which respondents to interview (Patel & Tebelius, 1987; Merriam, 1988; Ruane, 2006). The validity of the study is also strengthened by triangulation through interviews, observations and documentation (Merriam, 1988). The fact that the authors use multiple respondents and also interview both the Swedish and Chinese unit strengthens the validity (Merriam, 1988; Ruane, 2006). The validity of this research should also be evaluated from the limited time period of 20 weeks, which may be a weakness. What strengthened the validity was that the authors let one manager at the company review the report before being published (Maxwell, 2013; Merriam, 1988).

Reliability

Projects often differ from standard organizational processes due to their temporality and uniqueness (Hanisch et al., 2009). The reliability that the exact same results would be obtained in another study is unlikely even though many findings probably would point in the same direction, especially if it's executed at the same case company. The raw data from the literature review on the other hand would probably not vary that much if the same keywords and the same search engines were used. Also, the company information such as documents and processes and facts would probably not vary much if collected from the same company. The reliability of the respondents may vary since the interview process itself is a dynamic process (Patel & Tebelius, 1987; Gubrium & Holstein, 2002).

3. Theoretical Framework

This chapter involves previous research regarding offshoring, transfer, technology transfer, cross-culture, knowledge management and project management. The theoretical framework helped the authors to create legitimacy and authority as well as to constrain the research to a reasonable scope.

3.1. Offshoring

Offshoring can be referred to as the relocation or a transfer of a company's business activities to another country, (UNCTAD, 2004; Thakur, 2010) it also implies that the domestic company take full ownership of the plant and activities that are located abroad (Aspelund & Butsko, 2010). Company's usually offshore production processes and intermediate goods but other processes such as customer support, financial and legal services has become more common to offshore (Banri et al., 2008). In recent years two other main drivers has gained significance for offshoring business abroad. One of these is the knowledge-accessing motive. Today many large companies no longer have the diverse component of knowledge or personal within their own organisation to be competitive in research and production (Bierly et al., 2009). The other one is to better understand the foreign market and creating local value with customers and governments (Dunning & Lundan, 2008). Offshoring can lead to advantages such as cost improvements, higher productivity, increased profitability, flexibility, focus on core competence and a stable economic growth. Offshoring have also a backside and can result in control- and innovation reduction, a need for greater coordination requirements and the company can be dependent on vendors (Thakur, 2010; Davis & Naghavi, 2011).

It is difficult for companies to maintain a sourcing strategy that is cohesive and many companies therefor fails to manage a successful relationship with their offshore partners (Vivek et al., 2009). Offshoring can lead to long lead times, poor quality, high level of inventories, slow response, control and coordination problems (Mefford, 2010). There are also risks with offshoring like infringement of intellectual property, complex to handle business functions and activities because of the geographically distance, different institutional settings, reduced quality and service levels, difficulties to control and observe the behaviour of the service provider, loss of managerial control and process knowledge. These factors needs to be taken in consideration when developing an offshoring strategy (Massini et al., 2010).

One challenge that the company faces is to select the offshore location since every location have a combination of advantages and disadvantages that is unique. One location maybe offer a decent infrastructure and qualified workers while one other location offer a poor infrastructure but a low labour cost (Vestring et al., 2005). Cultural differences between the domestic and offshore location increase the cost for offshoring and companies need to take this in consideration when choosing the location (Bunyaratavej et al., 2007). One factor that influence the location choice is the common spoken language between the two locations, the size of the home country is one other factor that have influence when choosing the location (Doh et al., 2009; Thakur, 2010). One other challenge with offshore is the ownership and the coordination

of the offshored activities but also the overall consistency of the globally organizational system (Hutzschenreuter et al., 2011). The cultural and the geographic distance between the domestic location and the offshored location affect the coordination, knowledge transfer and the control in the organization (Graf & Mudambi, 2005). In order to avoid this, the company is required to apply mechanisms that can reduce the distance within the organization (Kumar et al., 2009; Srikanth & Puranam, 2011).

One other challenge with offshoring is the communication between employees at the domestic location and the offshored location. Employees at geographically spread locations with different language and culture have to rely on technology based coordination mechanisms that is less superior instead of being coordinated face-to-face by the domestic location (Javidan et al., 2005). It is not possible to observe each other's work performance because of the distance between the domestic and offshore location. The time gap is also a challenge to organize and synchronize to find a way to communicate with each other. Cultural differences are also one challenge the company need to be aware of. It can easily be misunderstanding when having back and forth communication with actors from different cultures (Kumar et al., 2009). Because of the global distance there is a need of communication processes for representation, description, specification and communication of tasks outcome and performance. The processes are supported by communication technologies like phone calls, e-mails, videoconferencing, electronic file transfers and different computer-supported collaborative work technologies (Kumar et al., 2009). Companies need to learn to organize teams that are geographically dispersed, handle cultural differences, work across time zones and manage high employee turnover to be successful. This is something that needs to be learned and that companies not necessary possess. Companies are less likely to develop offshoring strategies in an early stage if they don't have routines to questions their old pattern neither if they don't access nor use knowledge and information from their external environment (Lewin & Peeters, 2006).

Organizations can experience issues such as the relationship and ownership of the offshoring setup, the coordination mechanisms between the different organizational activities and tasks, the distance between the two locations, likewise the overall consistency of the globally dispersed organizational system (Jensen et al., 2013). The coordination, knowledge transfer and control in a company is adversely affected by the geographically distance between the domestic and the abroad location. To avoid this, company's need to apply mechanisms that reduces the distance within the organization (Kumar et al., 2009). It becomes clear that many factors may ultimately determine the success or failure of an offshore decision. The competence to build and share the same organizational culture, blend the best practices with home office mandates in managing human resources and the ability to transfer best practises across locations are all very crucial components to achieve an successful offshoring strategy (Youngdahl & Ramaswamy, 2008).

To become competitive and to achieve higher production efficiency, the company need to choose offshore suppliers that can provide high quality for a less cost than what the suppliers in the domestic country can provide. Outsourcing is an option for the companies that search for

competence that can be fined abroad that doesn't exist in the domestic location (Andersson & Karpaty, 2007). One other factor that is affecting a company's offshoring strategy is the ability to supply the market faster with new or improved products than the competition. For companies to be able to respond quickly to new market demands, exploiting new technology and market opportunities and to be able to work with product development around the clock, there is a need to developing organizational capabilities for accessing qualified talent. This will lead to a quicker respond to market changes and the time to market can be improved. Country risk factors, infrastructure and government policy are three factors that have impact when a company makes a location decision (Massini et al., 2010).

3.2. Transfer & knowledge transfer

Employees with the right competence need to be in place before the transfer activities start, otherwise there is a risk that deadlines will not be achieved in time. There should be a focus on key resources where a core team and tasks shall be selected and prioritized when there is no time to provide training for the employees during the transfer. It is also necessary to motivate the employees that are involved in the knowledge transfer. This is to avoid cooperate problems between the employees and the receiving part when they can feel threatened to lose their job. The offshored location might have a different culture than the domestic location and therefore it is essential to train the employees in cultural awareness in an early stage. During the transfer, product documentation should be ensured thus it will ensure continuity in the future and new product teams can be more independent. There is a need for support through coaching to maintain efficiency and product quality when a transfer can result in immediate and long-term consequences (Smite & Wohlin, 2010). A transfer takes time and in the beginning of a knowledge transfer, employees at the offshored location are less productive as they are learning. It is crucial for organizations to plan and to inform about decisions regarding the work between the locations since different products are different suitable to transfer (Wohlin, 2011). The cross-border transactions have increased rapidly over the past 20 years by the globalization of economic activities (Kumar, 2002). With this huge increase in cross-border business, a superior need for cross-border knowledge transfer is greater than ever and will continue to increase and has become a key issue for globally distributed work (House et al., 2004).

It is crucial for multinational corporations to understand the international knowledge transfer to successfully transfer any work related operations across national borders or culture boundaries (Javidan et al. 2005). Knowledge implicates when an individual using his or her perception, experience and skill to process information (Kirchner, 1997). Information is little worth itself until it has been processed by the human mind (Ash, 1998). Knowledge is embedded in rules, processes and routines that exist in the collective or individual resources. It is explicit and codified in formal rules and tactics and is a product of human reflection and experience. In essence it is about how individuals and groups communicate and learn from each other and is reflected in the national culture of thinking, practices and values (House et al., 1999). A successful transfer of knowledge requires the target unit to assimilate the new knowledge and use it (Javidan et al., 2005). The greater the culture difference between the receiving unit and the source unit the more difficulties the people in the receiving unit have in seeing the

advantages of adopting routines and practices from the source unit (Stahl et al., 2004). Also, the people that are responsible to transfer knowledge often become the minorities in the context of the majority at the new site (Argote & Ingram, 2000). The knowledge transfer process within an organization is defined as when one unit is affected of another by their experience (Argote & Ingram, 2000). It is a process through which one unit identifies and learn any specific knowledge that comes from another unit, and reapplies this knowledge in another context (Hansen et al., 1999; Oshri et al., 2008).

Tacit and explicit knowledge are two different categories of knowledge (Nokata & Takeuchi, 1995), see figure 4. Tacit knowledge is often deeply embedded, non-verbalized, intuitive and unarticulated. Tacit knowledge is not easily transferred and communicated to others and is often tied to the environment, buried in personal beliefs, experiences and culture (Inkpen & Wang, 2006). In contrast, explicit knowledge is transmittable verbally or by writing it down and is embedded in formal, systematically language, explicit facts, manuals, computer programs and training tools (Kogut & Zander, 1992). The flow of knowledge is one of the critical factors for an organization to be successful (Hillson, 2009; Snider & Nissen, 2003).

Figure 4 - Two different kind of knowledge

Knowledge transfer can occur explicitly when two units communicate with each other about a practice that have showed greater impact on the performance. Knowledge transfer can also occur implicitly when the recipient unit has implied and understood but isn't able to express the acquired knowledge. This can be a situation when an individual uses a modified tool to improve its performance and the individual can draw benefits from the improved details but it's not necessary for the individual to understand how the modifications has improved the tools performance. This is similar to when routines or norms are being transferred to other members who are not able to articulate the norm or being aware of the knowledge behind it. The individual level is exceeded and include transfer at higher levels of analysis such as the product line, team, division or department when knowledge is transferred in organizations (Argote & Ingram, 2000).

There are several aspects to take in consideration when moving or establishing a new manufacturing unit on a new site. There are also several tasks that need to be done within time and budget such as move of systems, equipment and facilities. Knowledge and experience is a success criterion and also the most difficult part to transfer (Madsen et al., 2008). One challenge that companies faces is the individual and social barriers that prevent documentation and the articulation of experiences and knowledge (Disterer, 2002). There are particular barriers when it comes to analysis of failures and mistakes in an open and honest way. There

are rarely occurring an open and productive atmosphere in most of the project-based organizations, which could facilitate articulation and analysis of errors (Boddie, 1987). One other problem is the motivation to establish proper reviews after finishing a project. It is obviously that there is a benefit for the entire organization if individual employees can use the knowledge and experiences from previous projects (Prusak, 1997). It is important to prepare the organizational culture to adopt, accept and utilize new knowledge transfer activities and this can lead to an effective knowledge transfer within the organization and a lesson learned. Knowledge management is about fostering an organizational culture that encourages and facilitates the creation, sharing, and utilization of knowledge and not just about transferring knowledge. It is also important for the project manager to combine different professional and organizational cultures into one project culture that facilitates effective knowledge management. It is very important to ensure that knowledge is diffused and produced throughout the organizational hierarchy and across project boundaries. This requires an understanding of the professional cultures and the organizational complexity that motivate and guides the people that is involved in projects (Hillson, 2009).

There are many factors that can hamper the knowledge transfer between remote sites and dispersed teams (Cramton, 2001). There are often unique and local routines for working, training and learning (Desouza & Evaristo, 2004). There can also be differences in skills, experience, technical infrastructure and development tools and methodologies (Boland & Citurs, 2001). The time- zone difference can also hamper the knowledge transfer since it reduces the window of communication and real time interaction (Oshri et al., 2008). Different cultures also create a barrier in knowledge transfer with different languages, values and norms of behaviour, and national traditions (Carmel & Agarwal, 2002). To overcome the factors associated with transfer knowledge communication technologies and occasionally meet face-to-face and to discuss project matters (Cramton, 2001).

Learning and know-how transfer across the exchange interface is created by mutual trust, respect and friendship between the alliance partners. Knowledge transfer is supported by partnership that is based on respect, trust and social capital (Inkpen & Wang, 2006). It is important that the partner relationship is based on openness and transparency to create a flow of knowledge. Relationship openness is the ability and willingness to share information and communicate openly in a joint venture partnership. In a cooperate alliance an essential feature of the relationship between the partners is extensive communication (Inkpen, 2000). A key factor for a successful cooperation is the ability to transfer valuable knowledge effectively across organizational boundaries (Nielsen, 2005). There can be difficult to achieve successful knowledge transfer since it exist several barriers when sharing knowledge and learning in international organizational cooperation. Some of the boundaries are cost associated with accessing and finding valuable knowledge, undesirable spill overs to competitors, but also differing organizational cultures (Lam, 1997; Inkpen, 1998; Dyer & Nobeoka, 2000; Simonin, 1999; Simonin, 2004; Salmi & Torkkeli, 2009).

The costs involved in knowledge transfer arise from differences in cognitive structures, values and practices, as well as language and communication barriers (Simonin, 1999). The most basic

barrier is language that can cause communication problems, especially in non-face to face communication. One way to deal with this problem is to increase the level of face-to-face communication. The more hidden costs arise from differences in culture values and require more effort in all stages of the project to be managed and understood. Transfer knowledge is very much context bound where managers and employees must spend time and resources to provide the relevant information to the target unit. The willingness to do so depends on two types of culture collectivism. Managers in a high in-group collectivism culture are more reluctant to share the knowledge with outsiders while managers from a high institutional collectivism is more concerned to spend the time and effort to build close relationship with outsider (Glisby & Holden, 2003). To better manage the transfer of knowledge across cultures managers can define common goals in advance of knowledge transfer, map up and understand the other side's cultural profiles, assign relationship managers in cross- cultural and transfer of knowledge that have regular meetings and face-to-face communication where they feel comfortable and confident to work together, and last but not least to see the cross-cultural knowledge transfer as a learning opportunity and learn to other knowledge transfers (Javidan et al., 2005).

Knowledge management is essential in efficient project management and project team members frequently need to assimilate knowledge that already resides in the organizational memory. The personal ability and effectiveness to do so will ultimately determine the projects and the company's success. However, project information is infrequently captured, retained or indexed so that external people to the project can regain and apply it in future projects. In project-based organizations most projects are conducted under strict constrains of time and budget. The team members from a completed project is usually needed and recruited to the next project with other team members and project leader. It is rarely possible for all team members to undertake a systematically review of a completed project and evaluate the lessons learned from it (Argote & Ingram, 2000).

3.3. Cross- culture

Culture adoption can be expressed in three levels: to understand, to adjust, and to adopt, and in that order, see figure 5.

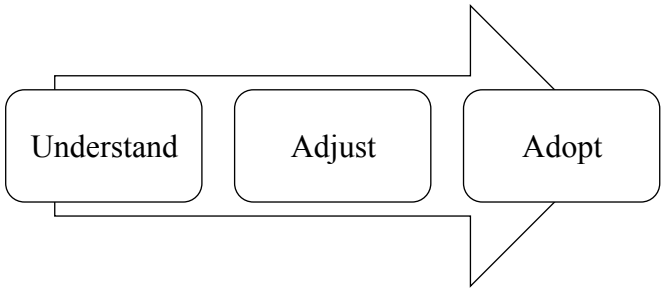


Figure 5 - Culture adoption

China is distinctly different from other countries in many ways in means of culture, both in a social and work context and is therefore a challenging destination for Western businesses (Kealey & Protheroe, 1996). In traditional Chinese culture the elders is respected and the younger members of the leadership group is expected to respect and defer to them (Chen &

Chung, 1994). This is reflected in the Chinese work context whereas the Chinese managers expect age and general life experience to be given some priority in discussion and decision-making, Westerns usually priorities experience and expertise at first place, this can be viewed in figure 6. The educational background also differ a great deal between a foreign and a Chinese manager where as a senior manager in China typically has a good technical background but rarely any formal management training. (Li et al., 1999)

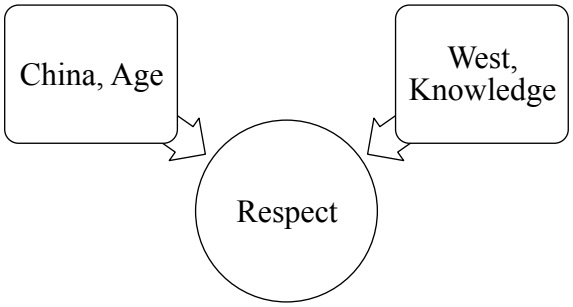


Figure 6 - Chinese versus Western Culture

In the West there is a greater delegation and decentralization of the decision-making and control, structures and rules is only seen as coordinating activities and as reporting purposes. In China the bureaucracy is seen as ownership, control and centralized decision making and employees follow instructions without questioning (Iverson & Roy, 1994; Sergiovanni & Corbally, 1984; Smith & Peterson, 1988). Chinese business practices are grounded in the traditions of Chinese family business where the objective is to maintain control within the family. One implication of this is that performance evaluation will tend to favour workers that support to the family over workers that challenge family authority. Other well-known characteristics in the Chinese culture that also have a direct bearing on the practice of performance evaluation are Face (mianzi), Guanxi, Fatalism and Confucianism, see figure 7. Mianzi can be thought of as a form of social currency and status that one has and will affect the ability to influence others. This is important to consider when performance reviews and other discussions and confrontations arise. These manners should therefore be held in private, to avoid the "loss of face" and can also be a reason for Chinese to avoid these kind of situations (Huo & Glinow, 1995; Easterby-Smith et al., 1995).

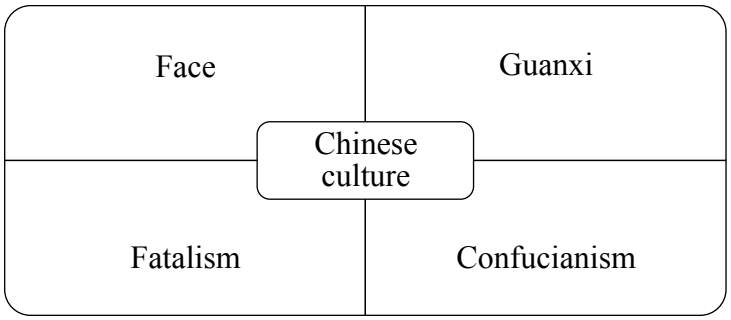


Figure 7 - Chinese culture

The concern with mianzi and the emphasis upon equality in the Mainland Chinese workers also makes it difficult to publicly act upon the differentially based on performance levels. To

prevent the loss of face Chinese individuals are likely to blame their own problems upon external factors. This kind of behaviour is natural and occurs in all cultures but is more formally ritualized in the Chinese culture than in the West (Stipek et al., 1989). Face can also be traded and used when enter a new market which is neither familiar or nor status exists. The function of a third party/person can be used to create the face needed and is frequently used in the Chinese society to achieve mutual benefit. Receiving face by a giver is widely held and the giver expects reciprocity from the receiver (Cardon & Scott, 2003). The appropriate way of giving face to a partner is by frequently mentioning the partner's accomplishments and treating the partner with the right etiquette, but also avoid mentioning issues in public (Kim & Nam, 1998).

Guanxi is a form of relationship management and can be described as an extended family network and to bond the exchange partners through the event of exchange of favours and mutual obligations in Chinese culture. Guan means "fortress" or a "pass" and Xi means Inter-connected (Fan, 2002; Luo, 1997; Xin Hua Dictionary, 2004). One way for Western multinational corporations to achieve guanxi is to enlisting the support of local allies, which entitles a greater deal of participation in the local rational system. But also to emphasize the social skills and Chinese culture knowledge are key competences that can strengthen a company's guanxi (Salmi, 2006; Lin & Germain, 1999).

Fatalism in Chinese culture is a philosophical doctrine that argues that the subjection of all events or actions is fate. Further the Confusion philology is an ancient form of philosophical system which emphasis that a moral leader is good leader and is often associated with values such as obedience, respect of authority and loyalty. This is reflected in the Chinese work culture where as the evaluation of a leader relies heavily upon moral character, and that a moral worker is an effective worker (Wang, 1990; Chen, 2004; El-Kahal, 2001). The power difference and hierarchy observed within the confusion philosophy and the Chinese society are also a relevant topic in a work context. It can make it difficult to have a meaningful dialogue since a subordinate are expected to be passive rather than actively participate in a discussion (Easterby-Smith et al., 1995).

3.4. Project management & knowledge management

Companies work in projects to achieve goals that are set by the management. An individual or a small group of people are responsible and have authority for the executions to achieve the goals that are set. The project manager is responsible to plan and coordinate the activities within a project to achieve the goals. The project manager is also responsible to correct and identify problems in an early stage, responsible for the environment and the client, decision making regarding trade-offs between conflicting project goals and to ensure that the managers of separate tasks do not optimize these at the expense of the whole project (Meredith & Mantel, 2009).

Planning is a crucial task in project management and is considered a central element in modern project management. Investments in project management processes and procedures that support planning reduces uncertainty and increases the likelihood of project success. Also, involving

end-user is recommended and should start at the first stage of planning and continue until the project ends. Considerably efforts for planning and preparing in advance and involvement in all phases of the project can highly contribute to the project success (Dvir, 2005). Enhanced production complexity, greater customer requirements and increased competition make technology transfer an important part of the firm's business strategy and requires a competent project manager (Kumar et al., 2007). One major obstacle for a project manager is that the people needed for the project often has to be borrowed from the functional department. First the project manager has to negotiate with the functional department manager, and then if successful negotiate once more and convince the people themselves to take on the challenging temporary project assignments. Usually the project manager wants to borrow precisely the people the functional department manager would like to keep the most. Besides of managing the central elements such as planning the project manager has to sense interpersonal conflict in the project team or between team members and outsiders (Meredith & Mantel, 2009). Projects also differ from standard organizational processes due to their temporality and uniqueness. Discontinuous work content and project groups, a lack of routines in the organization, short team period and cross functional groups of intern and external experts are the characteristics of a project (Prencipe & Tell, 2001; Schindler & Eppler, 2003). A competent project manager with specific leadership skills is required when projects in many cases are performed beyond the hierarchical lines of authority (Ekstedt et al., 2003).

Knowledge management is important to manage especially in cross- functional projects which is the set of practices an organization applies from the learning of previous projects to store, create, use and share knowledge within the organization (Love et al., 2005). Project knowledge management is caused by the inherent of project characteristics. Every project is unique and temporary often with changing workforce and diverse skills, are short term orientated with people working together for a short period and may never worked together previously and do not expect to work together again, and integrating internal and external knowledge. Project participants have to adapt quickly to new contents of work and conditions that creates a major obstacle to handle. This is especially true if there is a lack of routines and organizational memory and other mechanism of organizational learning (Brusoni et al., 1998; Meyerson et al., 1996). Company's faces challenges like increasing complexity and difficulties to coordinate the work when activities are relocated abroad (Kumar et al., 2009; Srikanth & Puranam, 2011). There is not possible to have an informal coordination and it might be hard for project teams to build up a mutual social environment likewise to communicate (Barlett & Ghoshal, 1999; Galegher et al., 2014; Martinez & Jarillo, 2015). It is required that companies are able to coordinate activities across different institutional systems and cultures when relocate sub-components or organizational tasks (Kumar et al., 2009; Srikanth & Puranam, 2011). This is a big challenge where there is a big risk that operational efficiency will be inhibit due to lack of trust, lack of understanding and communication when delivering tasks as well as status differences between domestic and foreign units. The employees at the domestic and the foreign location have to rely on less superior technology-based coordination mechanisms which can be a challenge since they have different culture and spoken language (Storper & Venables, 2004).

It is important to communicate the projects mission clearly during the planning stage and fully grasp client's needs and establish with them the projects limits and priorities. Similar to this, top management is also important since it is in the planning stage feasibility studies and budgets are made, negotiations are conducted with various internal and external actors, formation of the project teams and the determination of the work processes. Thus, it is understood that top management support is a necessary condition when carrying out projects in an organisation and when problem occur it is important that the project team rapidly identify the source and solve it. This indicates that it is important to have a flexible workforce and environment that can react rapidly and effectively to the problem that arise (Belout & Gauvreau, 2004). To achieve project success it's important to be on time, to budget, realistic schedule, adequate funds/resources, and clear goals/objectives, methods and techniques but also to get support from senior management (White & Fortune, 2002), see figure 8.

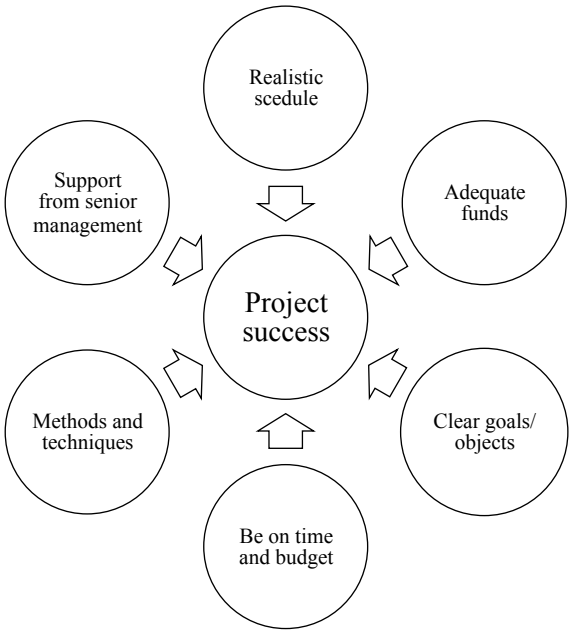


Figure 8 – Different factors to achieve project success

A successful project manager must sense conflicts early and not be afraid to confront and deal with it before it escalates. A project manager should act like a leader and capitalize on peoples stench and cover their weaknesses, know when to take over and when to let the team act independent, know when to punish and when to reward, know when to communicate and when to remain silent (Meredith & Mantel, 2009). Knowledge management can be described as the process of witch organisation leverage and extract value from their intellectual or knowledge assets (Davenport & Prusak, 2005). Managing these assets successfully so that value is delivered to the organisation as well as the individuals, the knowledge workers, is an enormous task. Knowledge management factors include leadership, supervision, work group support and encouragement of knowledge sharing and reuse (Kulkarni et al., 2007). Among the most difficult of challenges in knowledge management is organizational culture (Alavi et al., 2006). These factors mainly determine the success of project knowledge management whereas the

technical aspects like information systems and project management methods only serve as a supporting factor (Hanisch et al., 2009).

Organizational culture can be defined in terms of ideologies, sets of beliefs, basic assumptions, share set of core values, important understandings, and collective will but also defined as more explicit such as norms and practices (Sackmann, 1992). Those organisations able to manage their knowledge resources can expect efficient transfer of best practice (Skyrme & Amidon, 1998; Davenport & Klahr, 1998; Stata, 1989). Knowledge is composed of at least two different types, tacit and explicit, and both types cannot be managed in the same manner and vary depending on the type of business (manufacturing or services). In order to retain the knowledge that exists within a company it is important to provide opportunities for the employees to grow and to advance in their career (Brelade & Harman, 2000). Equally important is to offer a satisfying work environment in which they feel comfortable and to foster job satisfaction among the employees. Knowledge can also be brought in to the company by recruiting employees with the required knowledge and desired skills to fill the knowledge gap and those that possess the tendency for creating and sharing their knowledge to others (Wong, 2005).

Two different strategies that can be used in knowledge management and these are the personalization strategy and the codification strategy, see figure 9. The personalization strategy embodies identification of experts and their expertise (Hansen et al., 1999). It is very important to apply expert knowledge and to have ability to facilitate the contact and collaboration between the mentor and the trainee (Kulkarni et al., 2007). The personalization strategy views knowledge transfer that something occurs through direct contact for example through apprenticeship and mentoring The codification strategy relies extensively on the ability to codify, capture, store and reuse the available knowledge. The strategy is about encapsulating the knowledge into reusable objects with a system of classification, storage, and efficiently retrieving knowledge at the right time and place (Hansen et al., 1999).

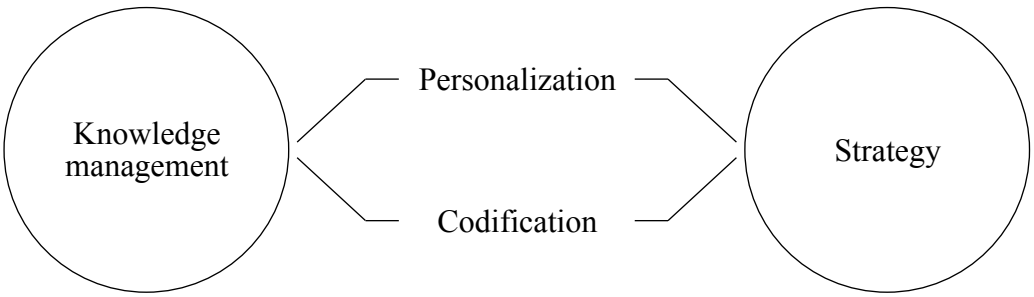


Figure 9 - Two different strategies within knowledge management

The success of knowledge management starts with securing the commitment of senior management along with incentives aimed at promoting knowledge sharing and teamwork. Especially in a climate of downsizing and retirement knowledge sharing is critical to prevent the loss of knowledge. Mechanism such as performance review, creating a safe environment

for people to share, and recognize those who have contributed will prevent such a loss (Seaman et al., 2005).

One of the most popular methods to obtain knowledge from projects is to do a lesson-learned review with workshops or meetings after each project. But often due to new projects or higher priorities in the organisation this never actually is being conducted. Another method often used by companies has to do with information technology and to create a platform, alike the role of Wikipedia, within the internal organisation such as the intra net. In order to capture the full potential of such a platform it needs to achieve a critical mass of participants and information to be enforces and used in a company. Further, additional effort of filling these platforms with knowledge should be as small as possible in order to gain a high level of participants (Hanisch et al., 2009). Videoconferencing and other tools is one way of creating a safe environment to encourage knowledge sharing between virtual teams. To achieve the full potential of this coaches drawn from senior ranks with the right level of leadership is suggested to encourage this types of projects. Knowledge management is hugely dependent on attitudes and actions of supervisors and the communication between supervisors and employees, and is what makes employees share and use shared knowledge (Kulkarni et al., 2007). The role of top management legitimizing and empowering the knowledge manage leaders is also very important (Alavi et al., 2006).

4. Empirical Findings

The empirical findings are presented in this chapter where the case company and the involved persons in "transfer projects in general" and the "on-going transfer project" are presented to give the reader an overall picture over the transfer process. Interview respondents both from Sweden and China give their picture of how they experience transfer project as well as the critical activities according to them. The authors own observations regarding the Chinese culture is also presented in this chapter.

4.1. Case company

The strategic decision to offshore the business to Shanghai, China, was to get access to the strong volume expansion in Asia. This was to be done by having a local factory as most other units within the same company/Enterprise already had. The objective was to shorten the lead times and create good relationships with the local market. Other objectives were also to create better relations with the customers which would facilitate the delivery project management. The company also hoped to lower the costs by having Chinese suppliers and increase the competitiveness of their products. This would also be beneficial for the Swedish unit since many of the Chinese suppliers would start deliver to Sweden, (Case Company., 2015).

The Transfer Project Manager (Transfer PM) explained that the majority of the products have been transferred from Västerås to Shanghai in approximately a dozen products since the move in 2005. Also, the Shanghai unit has grown larger than the Västerås unit, produces more products but also generates larger production volumes in Västerås. In recent years the R&D in Shanghai has developed three products aimed for the electronic industry. The Asian market along with the West has responded positively, which has led to the SU in Shanghai producing large volumes. Since the strategic decision in 2011 was to produce products in parallel, two products have been transferred to Västerås and one is on-going. Since this is a relatively new decision there is a learning curve for both factories and much has been learnt, but there is always a need for improvements to stay competitive.

The priority order on how to produce products in the company is as follows:

- Safety
- Quality
- Cost
- Delivery

4.2. Organizational structure

The organizational structure regarding transfer projects at the company and between the two units can be illustrated in figure 10. The main responsibility for the transfer project, both send and receive, as well as the Transfer PM are located in Västerås. The overall organizational structure at the two plants is not exactly the same, whereas the Swedish unit is much more developed and has larger departments with greater knowledge base. This is reflected in the way that the Transfer PM has a closer cooperation with all the persons that are involved in the transfer projects in Sweden, from managers and engineers to operators. The organizational structure and the cooperation with the persons that are involved in the transfer projects in China is mainly handled via managers which in their turn has a closer cooperation with the Chinese operators and engineers.

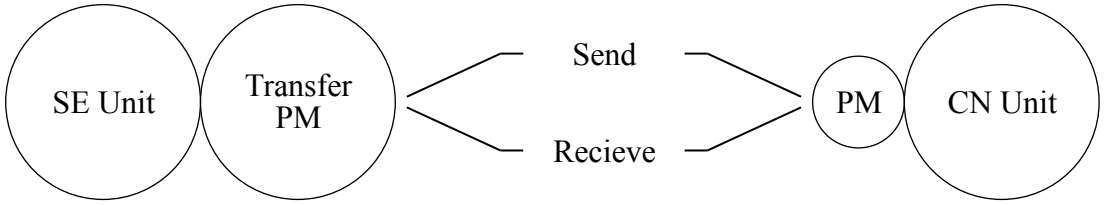


Figure 10 - Organizational Structure

Involvement and responsibilities of interview respondents

Sweden

One of these respondents was an Operation Excellence Manager for the SU. This position serves as a process developer in the sense of a strategic purpose. The work consists of developing global processes for the plant in Sweden, China and eventually in the USA. This is necessary since the aim is to produce similar products in every plant all over the world with the same quality and processes. In manufacturing these processes are referred to as Engineering Change Order (ECO) processes and is to be quality assured and implemented in the way that they don't interfere with the daily operations. The processes is supposed to work in a way that if a process is changed at one plant it will also be changed globally at all plants. One of many others of these processes is Work Instructions (WI), which is a process that is important for the assembly of the products. In the perfect of state the WI is to be similar at all plants, but since the factories differ depending on space and layout, machinery, workers etc. the company has not implemented it yet. There is work being conducted with improving this process, and the consultant responsible for this work was also interviewed in this research.

The Production Engineer Manager, who is responsible for the processes used in the production and manages this department, was interviewed in this research. This position possess many responsibilities where transfer project is just one part of many others. One of these responsibilities is to provide the transfer project with a Production Engineering PM. The person with this position that during the time was responsible for an on-going transfer project was also interviewed. This position is heavily involved in transfer projects and has the responsibilities of managing the project in the production and make sure the production will work when the product is being introduced at the new plant. These activities involve adjusting the factory

layout to ensure there is room for a new production line and new materials, and that the right tools being acquired. The people appointed for this position has varied over the years and is usually taken from other projects but sometimes new people such as trainees is also appointed. In this research another very experienced Production Engineer besides the one responsible for the on-going project, and two trainees that had worked as Production Engineering PM was interviewed. They all had very different experience regarding the transfer process. The reasons for not having the same Production Engineering PM is that transfer project is seen as a smaller project and is usually carried out over a shorter period, where people available from other projects are appointed.

One other department in the SU besides the production, which also is involved in the transfer process, is the logistics. This is operated by the Supply Chain Manager (SCM) who is responsible over the purchase and planning departments. The SCM was also interviewed in this research. This position possess many responsibilities and plays a key role for the whole SU, where transfer project is just one part of many others. It plays a key role since it needs to have a close cooperation with every other department at the SU and make sure material is been purchased, in the right time and from a qualified supplier. The SCM needs to have a close cooperation with the Production Planning Manager, but also the Strategic Purchase Manager. The purchase department is divided in local and strategic -departments were as the strategic department is the department where the person allocated for the transfer project is appointed, usually a PM. The Strategic Purchase Manager and the PM involved in the on-going transfer project was also interviewed in this research. The purchased department at the company also has a global purchase department where one Global Purchase Manager was interviewed. Also, a person working with developing standard purchase processes for all plants at the strategically purchase department was interviewed, the Strategic Purchase Process Manager. The Sales Manager and Production Planning Manager were interviewed, which has the responsibility of creating sales and production forecasts. This involves creating a master plan and exchange data between the plants.

China

The SCM at the Chinese unit was interviewed and has similar responsibilities as the one in Sweden and is not further explained in this chapter. Another respondent interviewed at the Chinese unit was the Production Engineer Manager. Since the organizational structure is not exactly equal at both plants, positions and responsibilities vary. The Production Engineer Manager almost has the same assignments as the Production Engineer Manager at the Swedish unit, and work close with the Production Engineers. Another respondent who was interviewed was the Production Project Manager. This position vary from the Swedish unit and can be explained as a Production Project Engineer Manager without as much technical involvement as in Sweden, and having a close cooperation with the Production Engineer manager in China. The Production Planner Manager at the Chinese unit was interviewed and this respondent has similar responsibilities as the one in Sweden. Also, one Production engineer was interview, which has the same responsibilities as the ones in Sweden.

4.3. Transfer project structure

The transfer projects are coordinated by a Transfer Project Manager from the unit in Västerås who has the main responsibility for projects going both ways, and has a close cooperation with the managers at the unit in Shanghai. The company works with a steering document with all activities included in a transfer project and is available in the process management database, see appendix 3. The transfer manager uses this document and previous experience and expertise to create a plan and schedule in excel. The company has two main release dates each year of new product lines and revisions of existing products. This serves as a reference point in the transfer project and every project is therefore planned backwards from the release date. The Transfer PM then sets up every project activity and important events such as holiday periods. These are kept as simple as possible and sub-activities are up to the responsible unit and manager to create. The Transfer PM has a close cooperation with every department involved in the organisation and gets prognoses for sales and production volumes to set up a production plan. When the Transfer PM feels satisfied with the project plan it's presented to the managers of each department responsible and the Production PM who will work in the project. When all the key stakeholders has agreed on the project plan it is then communicated out to every department in the organisation, to ensure that every department gets the chance to inform if there is any lack of resources in the project.

The number of activities and amount of work needed for each activity varies a lot if being the sending or receiving unit. The receiving unit that will implement the new product in their factory are the one with most resources and amount of work needed. The main priority for the sender unit is to provide the receiving unit with all information needed and in the company's global language English. It is then up to the receiving unit to decide what information to use or not. The information is mostly of technical information such as work instructions and data used in the Enterprise resource planning system (ERP) Systems Applications Products (SAP); drawings, Bill of Material (BOM), suppliers etc. Additional to this information the transfer projects also involves different employee "exchange" activities. In an early stage of the project a qualified Production Engineer is sent over for 2-4 weeks to investigate and give the receiving partner an idea of what's expected in forms of quality and production issues. If there are any needs for an additional Production Technicians (quality) later in the project one is sent over. In the middle of the project a Production Technicians (line manager) is send over for 2-4 weeks to investigate the production layout and work instructions. At the end of the project two experienced Operators is sent over for 2-4 weeks to learn how to mount the product and critical work instructions. The two Operators will eventually learn and instruct the other workers at the receiving factory. If there is any need by the receiving factory of support in the beginning phase an experienced work instructor will be sent over for support. Finally, just before the production is about to start a "fake order" with all options available by the customer is produced to ensure that every step in the process is in order. When the production starts an audit document with strict quality demands is used to ensure that the requirements in the production are met. When the requirements are met the transfer project is handed over to the line organisation, which then becomes responsible for the production and the transfer project is ended.

Involvement and responsibilities of interview respondents

Sweden

The activities in the transfer project and the involvement for each respondent vary depending on the task they were given. The Production Planner that is allocated from the planning department for the transfer project describes the activities as not so extensive compared to the daily work. According to the project plan the respondent had two activities that were given a total of three weeks to be carried out. The main responsibility was to create a master plan of the material forecast and in what percentage the different options were estimated to be. The estimated percentage came from China since they already had produced the product for some time. The other Production Planner was given one activity with three weeks to complete, and also describes the activity as not too extensive compared to the daily work. The respondent was responsible for updating material data in the ERP system. The Sales Manager from the sales department was interviewed, and also described the two activities given in the project as not so extensive compared to the daily work, as almost non-affecting. The respondent was given four weeks to complete the tasks and they consisted of update and define options available for the customers in Sweden and update ECO processes. Another respondent Mechanical Engineer from the mechanical department did not have time to participate in the interview case study, but was instead given a question sheet sent by e-mail to answer. The respondent was given four activities with two weeks each in the project plan. The activities consisted of comparing the structures between the two plants and correcting mistakes, translation to Swedish in the material master and prepare for test booking for various options.

The Production Engineer PM allocated from the operational department as the PM for the production was also interviewed. In this case the authors did not have to ask about Production Engineer PM involvement since this was very obvious just by looking at the project plan. The respondent was involved in almost every activity from the operational department and had the main responsibility for completing the project in time. Some of the activities given to the project manager were to create work instructions, purchase tools and fixtures, production layout in the factory including material storage and production audit process. In this project one Production Engineer was sent over by the operational department and also interviewed. This respondent was responsible for preparation of tools and fixtures, instructions for the Production Technicians (line manager) and for documentation of the processes used in the production. This activity was allocated three weeks by the Transfer PM and the respondent had to travel to the plant in China for the activity to be carried out. One Production Technician (line manager) together with another Production Technician (quality) from the production was sent over by the Transfer Project Manager at the same time. These respondents had the activities of document and observant the production in China regarding the production process and quality. These were interviewed separately just after they returned to Sweden. Two Operators sent from Sweden were interviewed as they were in China just before they went back to Sweden. Their responsibilities in the transfer project were to see and learn how the production process was carried out in China. They were also given three weeks to carry out their activity.

China

The respondent that did not have any activities in the on-going transfer project plan was a Production Engineer, with similar responsibilities and involvement as the ones at the Swedish unit. The respondent mentioned that the work mostly consists of translation and provide the receiving unit with data and update data in SAP. The respondent also mentioned that they have a close cooperation with the technical centre at the Chinese unit. This is also the department that one of the other respondents worked at as a Quality Engineer. The activities for this respondent mostly consist of recording and document key data and quality issues, but also to translate and provide the receiver unit with document and update data in SAP. Another respondent was a Process Engineer that had the activities of providing the receiver unit with all the work instructions in English that were used in the production. The authors also interviewed a Mechanical Engineer who in this project had the responsibility of creating and translate drawings of the tools and fixtures. Since the activity itself is very resource demanding the respondent mentioned that the activity was spread over a team of engineers. Also a Production Planning manager from the planning department was interviewed, which in this project had the activity of providing the Swedish unit with different documents and update data in SAP.

4.4. Transfer in general

The interviews carried out in this research have aimed to cover all the categories of people involved in a transfer project at the company. Some of the respondents does not have transfer project as their main task but is involved in some way. These respondents are typically a manager of some kind and referred to as people that work with transfer in general in this research, see figure 11. There specific roles and responsibilities, and the result from the interviews are presented in this chapter.

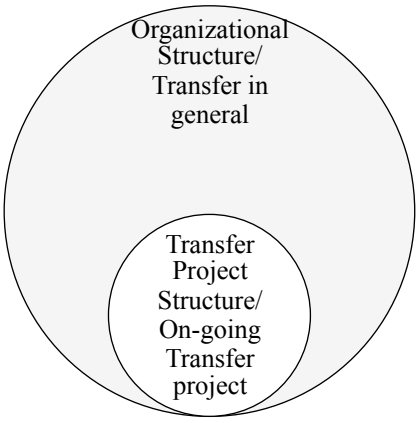


Figure 11 – Organizational Structure/ Transfer in general

Transfer process

Sweden

In a transfer project on a global scale, when having different factories, it is crucial that the factories involved works with similar processes if wanting to produce products with the same quality and standards. The case company in this research have different factories and organizational structures that would argue; having the same organizational structure would be

as equally important to implement. This is not the case according to the Operational Excellence Manager which argue that having the same process is the most important. Further one respondent talks about the purchase department as the strongest part in the organisation, where processes can be implemented in order to make it possible for the factories to receive similar components from similar or the same suppliers. The respondent Global Purchase Manager argues that the weakest and hardest part is to achieve the same quality and standard of products by having the same process in the production. When talking to the Strategic Purchase Manager and the Strategic Purchase PM the standard process is to order from the same suppliers, but that the quality and similarities between a Western and an Eastern supplier can vary whereas the Western supplier is often the best. They also mentioned that when the process of a transfer project is to be started and a Strategic Purchase PM is to be selected they are often involved in other larger projects at the company. They mentioned that they would prefer to be contacted earlier if possible to eliminate the risk of task not being completed in time and better plan their involvement with other projects. It is also mentioned that the project plan used in the transfer projects almost every time seems to be the same, regarding activities and allocated time, even if the product being transferred is not.

When talking to the Production Engineer Manager it is mentioned that the interface between the operational department and R&D, both global and local, has to be clear in order for the ECO process to work smooth. Since the aim is to produce similar products at all plants the product responsibly has to be crystal clear if a change is made and who is responsible for approval of the change. For this process to work smooth, the respondent asks for a speaking partner at the corresponding plant. The respondent also mentioned the importance of the changes made in an ECO process which is being changed in the ERP system, SAP. When talking to the Production Engineering PM in the operational department it is mentioned that the transfer process sometimes transfer a product before all issues such an s quality has been solved or corrected at the sending unit. This creates a problem since these issues is also being transferred to the other plant. The respondent also mentioned that there is no standard process on how to work in a transfer project except the project plan that is constructed by the transfer project manager. The project plan only consists of activities but not how these activities are to be solved. This is up to every person involved to solve by them self and is therefore done different from projects to projects. The respondent continues “especially as a technical PM where there are many sub-activities not mentioned in the transfer project plan it would be good to have a standard process for this in the operational department”. Often this is up to every technical project manager to solve individually and since this position vary with different people the process is always done different. Other respondents in the operational department brought up the same argument. They also argument similar to the purchase department that the transfer project plan used in the transfer projects almost every time seems to be the same, regarding activities and allocated time, and stated that this is very much product dependent in real life. They mentioned that the different from transferring a large product compared to a small product makes certain activities in the project plan stand out more than others and this is not really justified in the project plan. Another respondent in the operational department stresses that the process regarding WI covers the main production with the mounting of the actual product but does not cover other smaller activities such as customer options assembly,

painting and packaging. These sub-activities are done by routine and experience, and the respondent believes that these activities are as equally important to have a WI for as in the main production. The respondent continues and talked about the importance of standard processes and WI being complete in the transfer projects before the handover to the standard production for series production, which it not always are. The Production Engineer Consultant working with improving the WI mentioned that in China they use 3D Solid Works pictures with clear images and also cross section of the objects, which gives a very clear instruction. The Global Purchase Manager talked about the life after the transfer and believes that it is precisely this that is the difficulty of producing products with the same processes and quality. It is very easy that the plants starts to go in different directions and starts to live their own life, this may very well be because of the differences in the production layouts between both plants.

China

When talking with the SCM at the Chinese unit the respondent mentioned the importance of the same processes and templates at both plants. The respondent believes that sometimes for example the process with the ERP system, SAP creates some issues regarding suppliers. There is not just the cost of shipping that will be added to the price when a Chinese supplier will ship to Sweden, issues like different package etcetera generate a price difference. All this manners has to be updated in the SAP system and be approved, this creates a lot of extra work and is very time consuming. There would be better if there was a better and smother process for this, the respondent explains. The respondent mentioned also that there is work going on at the Chinese unit by creating equal templates for both plants to use in the supply chain. The Production PM believes that a transfer process is not just about copying everything from the sending unit and implement it at the receiving unit. There is a need for questioning from the receiving unit about the sender units process and how this process can be implemented in the best possible way. The key points for this needs to be documented when sending people to the other unit to learn about the existing process, and there is a need to develop a standard process for this. The respondent also talks about the life after any transfer process as being very important. The respondent describes a master process as the future vision that would generate a change in the global master process when a change is made locally. But the respondent also mentioned that it is not just about creating a global process, there is also a need to develop a good global cooperation. All the respondents involved in transfer in general believe that the cooperation and the importance of supporting each other's units in a transfer process as very important. The respondent responsible for the production planning explained the importance of having a clear process prepared for the information transfer in the planning department, before the USA unit will start transfer products. As it is today the Chinese factory is not ready and would like to have some expert help or support in the beginning phase of the transfers.

Critical susses factors, cooperation and communication

Sweden

There are many critical susses factors that need to be considered in a transfer project according to the Production Engineer Manager in the operational department. Different checklists and for all conditions to be met, risk analysis and assessments in an early stage of the transfer project including processes like Failure Modes and Effects Analysis for detailed information. Also,

the conditions for the two plants are different regarding Conformité Européene marking (CE marking), which is a European certification mark, and do not exist in China. All these factors need to be considered and planned in an early stage do eliminate extra work later in the transfer project. The Global Purchase Manager stated that the knowledge transfer is the hardest part to manage within a transfer process. This is also brought up by one trainee which explains that many times knowledge and instructions is not recorded on paper or in a database, instead knowledge is imbedded in the employees expertise through experiences.

When talking with the Transfer PM, Strategic Purchaser PM and the SCM involved in the purchase department there is a common view of what is to be considered in a transfer process. The plants need to have a global strategy and involve the other part when sourcing their suppliers. Things that needs to be considers are the capacity of the supplier and if they are capable of deliver to two plants, do the supplier have an export license and are the supplier able to communicate in English. The company has the strategy to use the same suppliers as the sender at least in the beginning of the transfer project, later the receiver can source their own suppliers. In the discussion with the Transfer PM it is mentioned that the transfer projects often encounter problems that is not familiar in the organisation. This is because the transfer projects needs to go deep and sometimes outside the standard process. Some of the critical factors that are encountered are different routines such as documentation, quality issues and different processes being used. These factors has been improved the last years but is still sometimes brought up to attention in the transfer projects. When a critical factor like this is encountered it is only communicated to the responsible department for them to solve, otherwise the transfer projects would get too big and complex.

Communication and cooperation is to other critical success factors that are brought up by the many of the respondents. In order for the communication to work in a transfer project the responsibilities has to be clear in all activities, every person involved needs to know who to contact if they have any questions. For the cooperation to work smooth, the communication needs to work and to be transparent. One way the company works with this is by having an exchange of workers and managers visiting each other's plants and meet face to face. This is very valuable according to many respondents, but sometimes it's also up to the managers themselves to take the initiative. Many respondents are positively regarding the companied video meeting room that creates a closer connection between the two plants. Another critical success factor that is brought up by the Production Planning Manager in the planning department is the ramp up and ramp down period when introducing a new product. Sometimes it tends to be a battle for material between the plants from the suppliers, China has a tendency of creating larger buffers that generates problems for the Swedish unit.

The Production Engineering Manager argued that the implementation of procedures is not difficult; instead it is getting them to work equally in a long term at both plants that are the difficult part. While the Production Planning Manager questions why there are no standard processes that is implemented when a close cooperation is requested from the company to have similar production and products. The respondent also mentioned that both plants have very independent believes on how certain processes should look like and is not convinced that an

implementation of a new process would be accepted without any questions. Overall the main view of the cooperation is positive and every respondent believes it is handled very well and believes that there are a lot of improvements to be made.

China

The SCM declared that there is a need for clear procedures in the transfer process. The respondent believes that the best way to generate this is to develop a standard "step-by-step" process under the global umbrella. Communication is also very important and the respondent mentioned e-mails as a tool just for exchange information and documentation, and not to be used in an urgent situation. The best way to solve urgent situations is to use telephone, in this way the communication becomes clearer. There is a need for the sense of urgency by the sender unit in a transfer process. The same sense of urgency by the receiving unit should exist at the sender unit. The transfer process is not just about supporting the receiving unit, it is also a responsibility to cooperate. The respondent declared the big difference of product and production knowledge between the two units, whereas the Swedish unit is very experienced compared to the Chinese unit that is very young. In the different management positions there are a lot of experiences working with different processes at the Swedish unit. The knowledge transfer between the two units is a very crucial success factor to manage if wanting to have a successful offshore strategy in the company. The Production PM also confirms this, and mentioned that the culture is very different and complicated when compared to Sweden. The operators have a need for processes that are easy to adapt, in order to make the production process simple.

When talking to the Production Engineer Manager the respondent brought up the importance of continuous improvement in the transfer process as a critical success factor. The process always needs to be questioned and improved to fit the receiving unit preconditions in the best possible way. The cooperation was also mentioned, as a critical success factor and the respondent believes that the face-to-face contact is very important in the process. The exchange of workers between the two plants is one other success factor according to the respondent. When discussing the critical susses factors, cooperation and communication with the Production PM, the respondent mentioned the importance of feedback. The respondent believes that the cooperation works great even though the time lag exist and when a question is asked, the respondents unit always get an answer back. But this is not enough, there is also a need to know what is happening during the process and sometimes there is no feedback on this. Overall, all the respondents believe that there is a need to support each other in the transfer process, but also that the cooperation between the two plants and the people involved works great on a personal level.

Evaluation process

When discussing with the majority of the respondents on how they work in their evaluation process and if they are looking at other successful units within their own organisation and how they work in transfer projects, the answer is not so much. The Production Engineer Manager in Sweden explains that the distance within their own organisation, which is a global and multinational enterprise, is very big. The few times or if this happens, it is done by a personal relationships with another employee at another unit. Another respondent talks about the R&D and their product development process as a similar process which could be used as an influence and a good example on how to work within the transfer project, but also mentioned that the product development process is much larger and complex and therefor may not fit the transfer process. Regarding the evaluation process after a transfer project the Production Planning Manager remember only one time this happened, and that were when a project went really bad. The respondent mentioned that a "lesson learned" is a standard procedure but usually never get the time it really needs to evaluate what's been successful or not in a transfer project. When talking to the Transfer PM, Production Engineer Manager and the Production Engineer PM in Sweden who are very often involved in transfer projects there is some recognition of an evaluation process being conducted, but also not as much as there would like. They all have the perception that the evaluation process is being conducted in real time, as the project is ongoing. There are a lot of discussions during the transfer process but not so much documentation, and the transfer project plan is always being upgraded to make improvements until the next transfer project. The Production Engineer Manager in Sweden mentioned that there is an evaluation framework that is supposed to be conducted after every finished project at the company but this is rarely being done. If an evaluation is conducted, it is only done briefly and the respondent is not aware of any evaluation process going on at the Chinese unit.

4.5. On-going transfer project

After interviewing the managers regarding transfer projects in general the authors also wanted to interview the employees who were involved in an on-going transfer project that was carried out during approximately 35 weeks, see figure 12. The on-going transfer project had started before the authors came to the company and was to be finished just before the thesis was to be finished. This was a good opportunity for the authors to follow the transfer project as it evolved. Almost every activity in the project had been or was about to be finished. Since the Chinese unit was the sender unit in the on-going transfer project their activities were less comprehensive, and therefore not as much respondents as in the Swedish unit were interviewed.

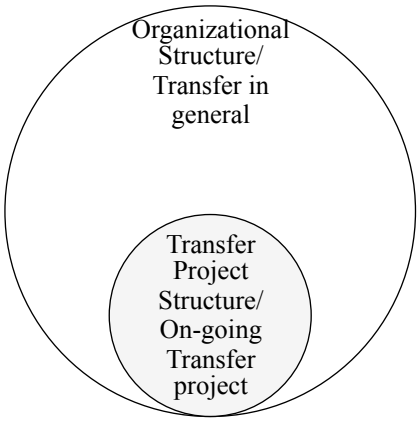


Figure 12 – Transfer Project Structure/On-going Transfer Project

Project plan execution and Project management

Sweden

When talking to the two Production Planners the respond feels like the activities given to them was very small and did not affect the daily work load. The respondents felt like their involvement in the project was so small that they didn't have much to add regarding their involvement in this project. They all felt like the time given for each activity was reasonable. One activity for one of the respondents in the planning department got delayed for one week because the previous activity was not finished. The respondent believes that this did not affect the project at all since the activity was not crucial and because it was in an early stage.

When interviewing the Production Engineer PM from the technical operation department responsible for managing the overall activities in the production, this respondent mentioned that the activities in the project plan are just a few of many. The respondent also mentioned a checklist that exists with many sub- activities included which works pretty well but not perfect. Together with the production, the respondent created a separate project plan with all activities needed to finish the project, this was done in the context of a workshop arranged by the respondent. The technical PM also mentioned the difficulties with creating a project plan, a project almost never plays out like expected where many new activities appear over time. The respondent felt that the time given for each activity was realistic.

The Production Technician (line manager) in the early phase of the project and the Production Technician (quality) sent in the middle of the project, and the two operators sent in the end of the project all describe their activities reasonable and manageable within the time given. The Sales Manager and the Production Engineer PM mentioned that there was a start-up meeting and where they had the chance to give input and feedbacks regarding the project plan before it started. One respondent mentioned that the release date was often set in advance and that all the planning activities was based on this. One of the Project Planner that was not very much involved in the project mentioned that the transfer project manager send out an e-mail every week with an updated project plan for everyone in the project to take part of. There are also weekly meetings for the most involved in the project to attend. The other Product Planner

describes the same situations regarding weekly meetings and feels like the transfer PM are easy to work with. There is given time for discussions at the meetings and everyone that participate in the project is involved. The contact with the Chinese plant seems to work well. When interviewing the respondents from the production department that were sent over to China with different activities, they all mention that they have followed the technical project manager's project plan, which was developed on the basis of the transfer project plan. They all have the same view regarding the project plan and that the PM responsible for the production department has executed and handled the project very well.

China
When talking to the respondents involved in the transfer project they all believe that the time given for each activity was reasonable. The Production PM at the Chinese unit, which in turn had a close cooperation with the Swedish transfer PM, managed all respondent. As it is today they just hand over information to the PM in China and don't get any feedback how the information was perceived. One of the respondents mentioned that a start-up meeting in the beginning of the project by the Chinese PM would have been appreciated. All the respondents mentioned that they had weekly meetings with their Chinese PM and that all these meetings work well, they can discuss any issues and the Chinese PM will take this with the transfer PM. However, they all mention that the involvement with the Swedish unit could be improved by more cooperation and communication.

Overall Execution

Sweden
The Production Planner mentioned the weekly meeting as very important, and believes that these have worked well in the transfer project. The transfer PM seems to have a good eye on the situation in the transfer project and always do a follow up on what has been discussed at the meetings. One of the Production Planners mentioned that the activities in the project became more than planned, this always seems to be the case since there are many new participants with less experience in a transfer project.

The Production Engineer PM mentioned that it was difficult to obtain production technicians for the project. This resulted in many activities being carried out by the respondent instead. There was also no clear role description in the production department. The Production Engineer PM describes the project plan as much more divided with more people involved sharing the overall workload, which has not been the case in previous projects that the respondent has participated in. All of the respondents sent over to China from the production department describes the project plan created by the Production Engineer PM as very well executed. The start-up meeting and the workshops was well arranged and they felt like their opinions were taken in consideration and was added in the production project plan. The Production Engineer PM seems to have a good eye on the situation in the transfer project. There are some opinions though that the distance in the communication between the operational department and the production department is sometimes far. Many times the operational department ask for the production department's opinion and ask them to put together an example or suggest alternatives in some issues, and sometimes there is a loss of communication back to the

production. It was also mentioned that sometimes the Production Technician (quality) involvement in the actual transfer project sometimes comes in the process a little late, and therefore it is hard to get a whole picture on what's been done and what needs to be done. When talking to the two Operators sent over to the Chinese's plant they feel like the biggest issue is the language barrier, but also mentioned that this was not the case working together with the supervisor from China. The supervisor and the cooperation between them have worked great and were very valuable. For the same supervisor to go to Sweden in the early start of the production of the new product is very valuable. The cooperation with the supervisor works great since they have met and know each other.

China
When talking to the respondents they all felt like they would like to have been more involved in the cooperation with Sweden, and not just with the Chinese PM. The respondents would like to have a closer cooperation with the engineers at the Swedish unit since the PM is no technical engineer and may not know everything in detail when they have a discussion or hand over information. One respondent mentioned that there must be a gap in the information transfer since there is only one PM at the Chinese unit, and the PM is given a lot of information for only one person to transfer. One respondent mentioned that there is a need for standard processes on how to work with different activities in a transfer process. Another respondent mention the issues with compiling the tools and fixtures drawings since these are always updated until the very last transfer date and sometimes the engineers have used a different template. Working in the same clients in the SAP system would have been much easier.

Improvement proposals

Sweden
When talking to one of the Production Planner it was mentioned that it does not exists any communication with a counterpart in China, and that the cooperation could be better by having this. The respondent mentioned that the internal communication could be improved, sometimes departments at the domestic plant does not seem to understand what consequences a delay in some activities can cause for another department. Another respondent mentioned that the transfer projects often consist of new people that never have participated in a transfer project before, from the PM to the Mechanical Engineers. These people are all very used to work in other projects but not specifically in a transfer project. The respondent believes that that this could be improved by setting up a special transfer organisation or group, with people that are dedicated to work with transfer project. When discussing potential improvements proposal with the Production Engineer PM the respondent mentioned that the production development projects in the organisation as much clearer. These project plans is much clearer with specific gates for every step in the project, this is something that the transfer projects would be better off by study the respondent believes.

When talking to the Production Engineer from the production department the respondent believes that an earlier involvement from the receiving plant would be beneficial for the transfer projects. The respondent also mentioned that there sometimes is a lack in the communication between the plants. Sometimes the corresponding contact at the other plant has

quit or been transferred to another department. This may results in an unnecessary chase of people and information, and the respondent thinks that this whole process should be system-dependent in some way, regarding e-mail etcetera.

When talking to the Production Technicians (line manager) the respondent mentioned that the test equipment used for testing the finished products is different between the two plants, also the two plants have different regulations and standards regarding CE marking for example. The respondent also mentioned the difference in space between the two plants where the Swedish plant has less space and therefor it is more difficult to implement new production layouts there. The respondent also mentioned the differences in operational training between the two plants. The Chinese plant has more people sent over than the Swedish. The other Production Technician (quality) sent by the production department also mentioned this, and the respondent believes that more people should be sent over to the sending plant before a transfer. The respondent also mentioned and believes that a transfer project should not be transferred before all quality issues are solved, which was the case in this transfer project.

China

When talking to one of the engineer respondents from China the respondent mentioned that the engineers at the Chinese unit would like to spend more time with the engineers from Sweden. Today the Swedish engineers only come and visit the production for the most part and not so much with the Chinese engineers at the office. Both units are limited in their communication with the operators since there is only one supervisor in the production that speaks English. Two respondents also mentioned that the WI could be improved by using the same template at both plants, and also mention that there are a lot of work instructions in the company that needs to be translated and converted. Another respondent mentioned that the company needs to develop a process for managing the knowledge transfer. One respondent believes that the face-to-face communication could be improved and mentioned the importance of having employees visiting each other's plants, but this could also be done more for better cooperation. Another respondent add the importance of having a Production Technician (quality) in the process as was carried out in this on-going transfer project, and should be used in future transfer projects also. The quality engineer should also visit the R&D two of the respondents' believes, and is not aware of this being done but believes that the critical issues could be solved easier and faster in this manner. All of the Chinese respondents managed by the PM in china believe that the cooperation and communication with the Swedish unit could be improved. This could be improved by involving the Swedish counterpart in the weekly meetings, instead of only rely on the communication between the two project managers in Sweden and China. They also mention that the Chinese unit is very keen on having standard processes and work with checklists for almost every activity and work they do.

4.6. Cross- culture

From a Swedish perspective

The Chinese are easy to deal with, they are accommodating and easy to work with the Production Engineer PM explained. The Chinese and the Swedish unit are different in many ways, the Chinese organisation has only been around for 10 years and consists of many young and well-educated employees with a high turnover of employees. This is also brought up by the Excellence Operational Manager, which also add that the Swedish unit is much older but possess much more of the knowledge base in the organisation with a smaller turnover by employees, even though many of these starts to get old with many retirements as follow in the next years to come. The knowledge is very distinguished in the production and assembly of products. The Swedish unit is in possession of more experience and expertise when compared to China. The Production Engineer PM explains that the cooperation is very personnel depending how it works. The respondent continues by explaining the difficulties that sometimes evolve especially when communicating with the workers. The language barriers often makes it difficult when communicating with the Chinese operators since they don't speak English, which then can lead to misunderstandings. Since the workers don't speak English the communication has to go through someone, usually a manager, which is mentioned by the other Production Engineer PM that is not involved in the on-going transfer project, this creates a "filter" when trying to communicate with the workers, and hard to get the workers views on the matter. The Strategic Purchase Process Manager mentioned the importance of follow up with additional questions, and retrace the questions in the communication to make sure the corresponding part has understood the message.

When talking about the cultural differences in the production with the respondents in Sweden one topic seems to be agreed by many of the respondents. The Chinese counterpart is very loyal and does exactly as they are being told, which can be both good and bad. The Swedish unit is questioning things much more if they encounter a problem and try to change the process. If an employee in Chinese encounters a problem, they seem to find a way around it and solve it anyway without changing the process. The Production Engineer PM mentioned that errors from the Chinese unit sometimes are not reported. It is therefore important to know what to ask for and how to formulate the questions, to find out if errors exist. The Production Engineer Manager, Production Engineer PM and the SCM explain this as solving a problem by adjusting the process instead of solving the real issue. The respondent continues, "many times this leads to longer lead times for products being produced and sometimes even poor quality, it can also result in issues appear in the future instead". On the other hand the Swedish unit sometimes takes longer time to finish a task since they want to investigate, analyze and discuss every possible solution in a problem to make sure to do it the right way. The Chinese unit is instead more vigorous and fast in their actions and work.

Another very distinct cultural difference is the hierarchy in China, this is also reflected in the company according to the Production Engineering Manager, Production Planning Manager and the Production Engineer PM. The hierarchy is clear and a Chinese worker never questions his supervisor or manager but in Sweden it is more transparent where a worker is able to have a

conversation about his or hers work situation with the company managers. The Production Planning Manager mentioned the importance of "going the right way" as it is formulated, if wanting to get to the core in the decision making process or extract the right information. The Production Engineer PM are questioning why the information does not go all the way to the receiver. The Chinese unit has a process of working with cross-functional meetings with the Chinese operators telling the manager about problems that arise. The Chinese are very good in keeping documentation and working with signal systems if a problem arise, but sometimes nothing happens according to the respondent which leads to the questioning of the information process. The respondent believes that this goes beyond the corporate culture and instead has to do with the Chinese culture. The hierarchy is also reflected in the work with the Chinese suppliers according to the Production Engineer PM. The Chinese unit may not get the same attention and respond as the Swedish unit if they notice that the quality from their suppliers have changed and become poor. Sometimes the Chinese suppliers send materials with better quality to the European market and inferior material to the domestic market, which may explain some of the quality issues the Chinese unit have to deal with. Overall, the Chinese unit is very fast in their work and always answer e-mail no matter what time on the day it seems to be, they are very loyal to their work and are always supportive one respondent from the purchase department explains. The cooperation works great and is easy going between the two plants. But sometimes another respondent mentioned, it feels like the Swedish unit is focusing on a more global level in their decision makings while the Chinese unit don't, and does not always consider what the best decision for both plants is. Regarding the cultural issues that are obvious and do exist in many ways, one respondent mentioned that the company used to have a course about the Chinese culture managed by the human resource department in Sweden before an employee was going to have a close cooperation with the Chinese unit. This arrangement was very positive and well received the respondent explains, but seems to have been forgotten even thou the cultures still are very different.

From a Chinese perspective

When talking with one of the Chinese respondent this mentioned the difference in decision-making. Chinese people normally don't take any decisions while the Swedish people are more independent and usually do. Another cultural difference is that the Swedish people are not so open, which a problem if wanting an efficient knowledge is sharing between the two plants. The Chinese unit is very willing to adapt and cope with any changes, while the Swedish unit seems reluctant to share their knowledge. The Swedish unit has accumulated a lot of experience and knowledge over the years that need to be transferred to the Chinese unit if wanting to have a successful knowledge sharing between the two plants. When talking with another respondent it is explained that the Chinese workers are not very challenging to the system, they just follow the instructions and rules that exist without questioning it. This is a big difference when compared to the Swedish workers, which always questions the different processes. Another respondent mentioned that the Swedish unit is much more careful about details while the Chinese unit are not. The Chinese people can accept a lot of problems and don't see this as being an issue while the Swedish people cant. The respondent explains that this can be reflected in the way the Chinese unit are much faster but have less quality in the work they performs.

4.7. Observations in China

China is a fascinating country in many ways which the authors have experienced first-hand by living in the country for five month. The authors have felt the pulse and experience the pace at which China together with the Eastern continent is developing and moves forward. During the five month living in Shanghai the authors have lived at East China University of Science and Technology which is one of the largest university in Shanghai with a total of approximately 24 200 Students and the amount is constantly increasing. The University is located near the city with a total of 20 minutes by subway, it is also located near the investigated company in the research with about 30 minutes by taxi. The authors have lived close together with some of the future engineers that one day will work at a similar company or the one investigated in this research. The authors have also travelled around China and visited cities like Beijing, but most importantly experienced the city of Shanghai in which many of the works at the investigated company in this research live.

None of the authors had been to China before the research and therefore a lot of private research was carried out about Shanghai and the Chinese society before travelling to Shanghai. This research was carried out by talking to the Swedish employees at the investigated company but also to meet-up with previous students that had been to the same university, and finally extensive research on the Internet. Even though the research was extensive much of the experiences and impressions perceived by the authors have been very different. One of the largest and perhaps most noticeable difference from Europe, Sweden and Västerås when compared to Asia, China and Shanghai is the share size of people.

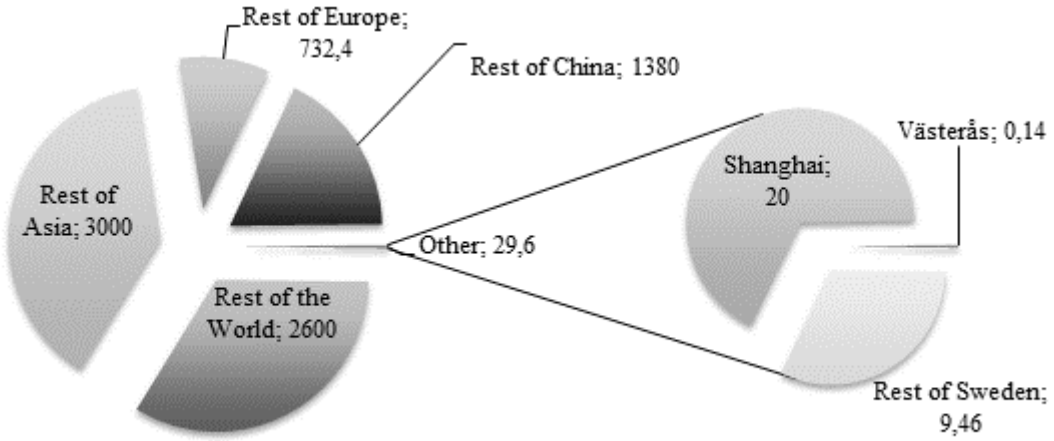


Figure 13 - Asian populations in contrast to Western populations, Shanghai and Västerås

Asia is the home to a total of 4.4 billion of the world's total population of 7 billion inhabitants. Further, China is the home to a total of 1.4 billion people whereas Shanghai and Beijing is the largest cities in China with approximately 20 million each, see figure 13. The Chinese culture seems to be very old compared to the West and seems to have been very hidden, closed and unreachable to the West until recent decades when China decided to open up more to the rest of the world. Since then, the openness and transformation of China has been very fast and evolve very rapidly in a short period of time. If compared to the West it is like the Chinese society

went from being farmers and straight into the present time of IT-revolution and high-tech society and thereby skipped the industrialization that the West went through. This is thus inevitable reflected in large parts of the Chinese society in the form of a constant expansion of the infrastructure, skyscrapers and buildings, new companies and large industries, capitalism and commercialism consumption. This is all happening very fast while the farmers from the mainland urbanise the cities and seek for a better life for their family which of course creates a mixed of people and cultures. Unfortunately, the rapid development that has to take part because of the fast urbanisation a lot of things lack the quality and standard of the West. This is also something that is not seen as a big issue and as long as it works it is just fine. Of course, this is not applicable to all areas of development and the things that has to be made by high quality standards, since there is a share size of people that will be utilize it, is also done so and sometimes even with better quality standards than in the West. One very noticeable difference of this is the infrastructure that is probably the best in the world, with its high-speed railway trains and super effective subway systems.

Further, the Chinese society has for many years and still is consider it self to be the centre of the world that in many cases is justified if studying the history and evolution of the world. Rather than going down the path of Chinese history the authors has notified that the Chinese society has been and still is a collective society if looking at its national boundaries, with this said it is a country of individualism with significant gaps in its social environments. The collectivism is reflected in the sense that the Chinese population is very adaptable and throughout history has learned to live and abide by the decisions that are best for the country at large. Meanwhile, the significant gaps in its social environments and the hierarchy has and still is very evident in today's society.

The biggest authority in China is of course the Socialist party and its government that has and are controlling the country under strict rules and regulations, and has done so for a long period of time in history. This is also something that is perceived as a normality and nothing strange, maybe even convenient by the greater part of the population in China. Because of the government's authority and ability to operating freely throughout the greater part of China it has also lead to a durability and a clear direction for the country's development, where strategic and long-term goals have been set, implemented and realized. The government is in many respect a very well thought out and well-made organization with everything from complex systems for the recruitment of its party members to the ability and power to act. Rather than going down the path of Chinese governance the authors can note that this also has a big influence of the Chinese society and is very different from a Western perspective.

Another very noticeable difference the authors have experienced is in which minority one are and experience as a Westerner in Shanghai and in the greater part of China. The greater part of the population in China does not speak any English, just like the greater part of the Western population does not speak any Chinese. The main reason for this is that English is not necessary since Chinese or Mandarin works absolutely perfect in the greater part of Asia, and Asia is a big continent. Further, the greater parts of the population in China never travel outside China and even less outside Asia for many reasons. Of course, if visiting an international

company like the one in this research the greater part of the company speaks English very well, sometimes even better than a Westerner. The younger population in China are getting there and some of them speaks English very well, especially the well-educated and these are many, but still many of them only speak Chinese. Another thing that is very prominent in China is that even though the greater part of the population in China considers them self to be the centre of the world, they look up to the West and seek for guidance and want to learn from the West. This is reflected in many companies and professions where they believe West is very successful and holds a great knowledgebase and experience in all kinds of areas. It may seem that many people in China sees the West as an illusion and very far away but still a place where everything is possible and where the social environments are really good, which is reflected in media and society.

5. Analysis

In this chapter a comparison between the theoretical framework and the empirical findings has been analyzed. The analysis is divided into following topics: "Offshoring Case Company", "Transfer & Knowledge Transfer", "Project & Knowledge Management", "Cross-Culture" and "Observations". The analysis has shown that much of the empirical findings do consist of many similarities but also differences when comparing to the theoretical findings.

5.1. Offshoring case company

When analysing the theoretical framework and the empirical findings it can be seen that the strategic decisions and objectives to offshore the business to Shanghai has many similarities, but also advantages that may not have been considered. One of the motives by the case company was to get access to the strong volume expansion in Asia (Case Company, 2015). This is also what Kotabe (2015), Hollenstein (2005), MacCarthy & Atthirawong (2003), Smolarski & Wilner (2005), Dunning (1988), Massini et al. (2010) and Dachs et al. (2006) mentioned by exploiting and opening up new markets, quickly respond to new marketing demands, increase the strategically flexibility, to following the investors, better understand and exploit foreign market, get closer to the key customer and local market as well as the ability to supply locally. Other motives by the company was to create good relationships with the local market and with the customers, lower the cost by having Chinese suppliers, shorten the lead time and increase the competitiveness of their products, (Case Company, 2015). This is similar to what the theory mentioned by accessing foreign distribution channels, goods and materials and creating local value with customers and governments (Kotabe, 2015; Hollenstein, 2005; MacCarthy & Atthirawong, 2003; Smolarski & Wilner, 2005; Dunning, 1988; Massini et al., 2010; Dachs et al., 2006). Other motives that may not have been considered by the company was that the offshore decision would generate more production volumes in Västerås and for the Asian market to response as positively as it has, but even for the Shanghai unit to grow larger than the unit in Västerås. This is what Thakur (2010) and Davis & Naghavi (2011) argues in the form of higher productivity, stable economic growth and new market opportunities.

For the R&D at the Shanghai unit to develop three new products for the electronic industry in such an early stage in the offshore decision may not have been predicted by the decision makers. This can also be validated if analysing the theory which mentioned cost savings in product design, product development, research and engineering but also accessing high skilled and educated workforce around the world and generate new technology opportunities as common advantages in an offshore decision (Baden-Fuller et al., 2000; Bunyaratavej et al., 2007; Lewin et al., 2009; Lewin and Cuoto, 2006). Other advantages to offshore the business is the opportunity to produce and work around the clock, which can be justified when talking to the interview respondents in this research. To focus on core business activities and competence and extending the culture and language diversity in the company is also mentioned as advantages (Kotabe, 2015; Hollenstein, 2005; MacCarthy & Atthirawong, 2003; Smolarski & Wilner, 2005; Dunning, 1988; Massini et al., 2010; Dachs et al., 2006; Massini et al., 2010).

5.2. Transfer & knowledge transfer

Transfer projects in a company with an offshore strategy between China and Sweden do consists of many issues that can be improved. This argument is confirmed both by the theory and the data collected from the respondents in this research. The transfer process could be improved by setting up a core team with the right competence that has been trained in the offshore locations culture and by motivate knowledge transfer in a transfer project (Smite & Wohlin, 2010). The data collected from the company confirm this as transfer projects often consist of new people that never have participated in a transfer project before, from the project managers and engineers to operators. One of the respondents believes that this could be improved by setting up a special transfer organization or group, with people that are dedicated to work with transfer projects. One respondent mentioned the company used to have a course about the Chinese culture managed by the human resource department in Sweden before an employee was going to have a close cooperation with the Chinese unit. This arrangement was very positive and well received, but seems to have been forgotten even thou the cultures still are very different. Further, one respondent mentioned the knowledge transfer between the two units as a very crucial success factor to manage to achieve a successful offshore strategy in the company. Another respondent mentioned the need to develop a process to manage the knowledge transfer.

A competent project manager with the right specific leadership skills is required since project in many cases are performed beyond the hierarchical line of authority (Ekstedt et al., 2003). The general opinion from all the interview respondents was that the company has a competent project manager who can handle a transfer project very well. The transfer PM is very experienced and seems to have a good relationship with both plants and has no problem performing beyond the hierarchical line of authority. Further, by investing in project management processes and procedures that support planning and involve end-user increases the likelihood of project success. The company does work with certain project management processes that do support planning and one of these are the steering diagram for transfer projects that has been developed and is constantly updated, this can be viewed in appendix 3. However, when talking to the majority of the respondents they believe that this could be improved by involving end-users more and by customize each project plan better, so it matches each individual product that will be transferred.

White & Fortune (2002) argues that the support from top and senior management is one other important factor for project success. There is a need for documenting the lessons learned during and after the process preferably create a platform, alike the role of Wikipedia, which is easy to use in order to gain a high level of participants (Hanisch et al., 2009). When analysing the results from the interviews and if referring to top management at each specific department and at each unit, the top management is supportive but sometimes also far away. Especially at the Chinese unit there is a sense from the engineers of just transferring information to the PM in China and don't get any feedback how the information was perceived from the Swedish engineers. Instead many of the respondent's stresses the importance of feedback and would like to have a closer and better face-to-face communication and collaboration with each counterpart at the corresponding unit. Some of the respondents in the production at the Swedish unit

mentioned that the operational department many times asks for their opinion regarding issues but sometimes there is a loss of communication back. If analyzing further the company also does have a platform, alike the role of Wikipedia, where steering diagrams is stored in the intra-net which is mainly handled by the managers. Further, there is a lack of evaluation processes or lessons learned during and after the transfer process.

5.3. Project & knowledge management

Javidan et al. (2005) claims the transfer of knowledge is the most difficult and important part for a company to manage in a transfer project. It is crucial that a company create an organizational culture that encourages and facilitates the creation, sharing and utilization of knowledge and where the employee feel comfortable and confidant to work together (Hillson, 2009). The technical aspects like information systems and project management methods only serve as a supporting factor to knowledge management (Hanisch et al., 2009). It is important that the partner relationship is based on openness and transparency and that there is a willingness to share knowledge and information (Inkpen, 2000). When analysing the result it is mentioned that the knowledge transfer is the hardest part to manage within a transfer process. It is not as simple as copy everything straight away from the sending unit and implement it at the receiving unit. The knowledge transfer between the two units is a very crucial success factor to manage according to both units, if the company wants to achieve a successful offshore strategy. The respondents declared that the life after a transfer project is very important as well as to support each other's units in a transfer process. The communication needs to be transparent and there is a need to support each other in the transfer process. Further, it is mentioned that the Swedish unit is very experienced and possess a large knowledge base in the company, both in product and production but also in the management positions, if compared to the Chinese unit that is very young. The Chinese engineers would like to spend more time with the engineers from Sweden and as it is for now they only come and visit the production. There is a need to develop a process for managing the knowledge of transfer.

Carmel & Agarwal (2002) argues that different cultures create a barrier in knowledge transfer with different languages, values and norms of behaviour, and national traditions. The need for face-to-face communication therefor matters and should be encouraged (Cramton, 2001). Videoconferencing and other tools is one way of creating a safe environment to encourage knowledge sharing between virtual teams according to the theory (Kumar et al., 2009; Kulkarni et al., 2007). The face-to-face communication is something that is brought up and could be improved according to the respondents. The video meetings that exist is brought up as a very positive experience by the respondents, mainly managers, who uses video tools as a way of communicating and having conferences at the company. According to some of the Swedish respondents the cooperation is very personnel depending and the language barriers often makes it difficult when communicating with the Chinese operators, and sometimes there is a need to follow up with additional questions. This is something that the authors have observed whereas the greater part of the population in China does not speak English. Many respondents mentioned the need for clear procedures and standard processes on how to work with different activities in the transfer process. One of the Chinese respondents emphasize that there is a need

to develop a standard "step-by-step" process under the global umbrella. One other Chinese respondent mentioned that the company would need to implement processes that are easy to adapt, in order to make the production process simple. One respondent underlines that it is not just about creating a global process there is also a need to develop a good global cooperation. Further, all the respondents believe that the values and norms of behavior and national traditions between China and Sweden are indeed very different and sometimes creates barriers in the knowledge sharing.

Two methods that can be used in knowledge management according to the theory are the personalization strategy which views knowledge transfer as something that occurs through direct contact for example trough apprenticeship/trainee and mentoring, whereas the other is the codification strategy which relies extensively on the ability to capture, codify, store and reuse the available knowledge (Hansen et al., 1999). The company do work with a form of the personalized strategy in the form of different employee exchange activities. This is mainly carried out on the production side in transfer projects, and one respondent from the Swedish unit believes that more people should be sent over to the sending plant before a transfer.

In order to retain the knowledge that exists within a company it is important to provide opportunities for the employees to grow and to advance in their career (Brelade & Harman, 2000). Equally important is it to offer a satisfying work environment in which they feel comfortable and to foster job satisfaction among the employees (Wong, 2005). Especially in a climate of downsizing and retirement knowledge sharing it is critical to prevent the loss of knowledge (Seaman et al., 2005). While the Chinese organization only has been around for 10 years and consists of many young and well-educated employees and a high turnover of employees, the Swedish unit is much older and possess much more of the knowledge base in the organization with a smaller turnover of employees and a higher number of employees that are approaching retirement.

Knowledge management is hugely dependent on attitudes and actions of supervisors and the communication between supervisors and employees, and this is what makes employees share and use-shared knowledge (Kulkarni et al., 2007). In this aspect the two units and cultures are very different according to the results. To better manage knowledge transfer across cultures it is important to define common goals in advance of knowledge transfer, map up and understand the other side's cultural profiles and assign relationship managers in cross- cultural (Javidan et al., 2005). Kealey & Protheroe (1996) emphasise that this is especially necessary when a Western company has a cooperation with a Chinese company, since Chinese culture is distinctively different from many other Western countries in many ways both in a social and work –context. The empirical findings show that it is important to define common goals in advance in transfer projects. It is mentioned that important factors need to be considered and planned in an early stage to eliminate extra work later in transfer projects. One respondent mentioned the importance of involving the receiving plant in an early stage of the transfer process. Many respondents mentioned that the project plan used in the transfer projects seems to be the same almost every time, regarding activities and allocated time, even though different transfer products vary a lot. The activities in the transfer project plan are just a few of many

whereas the production PM many times has to develop a separate project plan. Further, the role description in the production department sometimes is very diffuse and could be improved both in the transfer project plan but also in the production development projects in the organization and become much clearer, with specific gates for every step in the project. Some of the Chinese respondents would liked to participated in a start-up meeting in the beginning of the project together with the Chinese PM. This is also the opinion from some of the Swedish respondents but the general opinion is that both the transfer PM and the production PM has executed and handled each project very well, and a lot has been improved since earlier transfer projects.

5.4. Cross- culture

In China the bureaucracy is seen as ownership, control and centralized decision making and Chinese employees are more likely to follow instructions without questioning than a western employee (Iverson & Roy, 1994; Sergiovanni & Corbally, 1984; Smith & Peterson, 1988). This is something that has been observed by the authors and may even be convenient by the greater part of the population in China. The hierarchy is also confirmed by the respondents, that there are very distinct cultural differences in the hierarchy between China and Sweden. This has been observed by the authors in today's Chinese society where as the social environments and the hierarchy is still very evident. In China the hierarchy is much clearer and a Chinese worker never questions his supervisor or manager, while in Sweden it is more transparent when an employee is more likely to have a conversation about his or hers work situation with a manager. The Chinese counterpart is very loyal and does exactly as they are being told while the Swedish unit is questioning things much more if they encounter a problem and try to change the process. Further, Chinese people don't normally take any decisions while the Swedish people are more indecent and usually do. This is reflected in the way that the Chinese workers are not very challenging to the system, they just follow the instructions and rules that exist without questioning it. The Swedish people are not so open in general according to the results while the Chinese people is very willing to listen, adapt and cope with almost any changes. The authors have observed that the Chinese people look up to the West and seek for guidance and want to learn from the West.

Other well-known characteristics in the Chinese culture that has an indirect influence on transfer projects are Face (mianzi), Guanxi, Fatalism and Confucianism (Huo & Glinow, 1995; Easterby-Smith et al., 1995). Especially the loss of face can influence in the way that a Chinese individual are more likely than a western individual to not mention any problems with a process or product, or even to blame their own problems upon external factors (Stipek et al., 1989). This is confirmed when analysing the empirical findings that if a Chinese employee encounters a problem he or she seems to find a way around it and solve it anyway without changing the process. Sometimes errors from the Chinese unit are never reported and instead solved by adjusting the process rather than solving the real issue. Further, the results from the respondent's mentioned that the Swedish unit sometimes takes longer time to finish a task since they want to investigate, analyze and discuss every possible solution regarding the problem. The Chinese unit is much faster but have less quality in their work another respondent explained. Sometimes a product is being transferred before the quality issues has been solved

or corrected at the sending unit and this creates extra work according to many of the respondents. The Chinese people in general can accept a lot of problems like less quality and does not see this as being an issue while the Swedish people can't and is much more careful about details. This is something that is noticeable in the Chinese society and has been observed by the authors where unfortunately, the rapid development of the society and infrastructure that has to take part because of the fast urbanisation, a lot of things lacks quality and standard of the West. On the contrary there are also things that has been made with high quality standards, since there is a share size of people that will utilize it, and sometimes even with better quality standards than in the West.

5.5. Organizational structures with different conditions

When analysing further it can be noticed that the organizational structure is not exactly equal at both plants. Some respondents mentioned the importance of the same processes and templates at both units and that it is crucial that the factories work with the same processes and using the same templates. One respondent mentioned that having the same organizational structure is not as equally important as having the same processes, which is most important. Another respondent mentioned the implementation of procedures as not difficult, instead it is getting them to work equally in a long term at both plants that is the difficult part. When analyzing further the conditions for the two plants are different regarding CE certification. Western and Eastern suppliers can vary whereas the Western suppliers often are the best. One respondent mentioned the importance to have a global strategy and involve the other part when sourcing their suppliers. Finally, the product responsibly has to be crystal clear when a change is made and who is responsible for approval of the change according to one respondent.

6. Conclusion, Discussion and Recommendations

The previous chapter brought up important aspects in an offshore strategy and highlighting the important factors for transfer projects. This chapter summarize the findings and the conclusions regarding the research questions.

This thesis has resulted in a supporting framework, which includes important factors regarding transfer projects when aiming for parallel production, and especially regarding transfer projects between Sweden and China, see figure 14. The framework would also be applicable when considering other countries and companies in general that don't necessary have production as their main responsibility. The framework consists of crucial factors that are general and always will be important for any type of offshore company. If any factors e.g. quality or having the same process already exists e.g. when having an offshore location in a neighbouring country with similar cultures and perception of quality, it would only be a formality and check that the factors in the framework already are achieved. The framework is considered to be a supporting framework in additional to a company's transfer project steering document, and taken into consideration when discussing the company's strategy on a higher level.

Setting up a core-team and having a dedicated project manager that exclusively work with transfer projects in a company will ultimately lead to a smoother and more efficient transfer process. When implementing a new process such as a transfer project of a new product in a new organization, this will entail new situations and problems. It is therefore important that the members of the core-team exists of members with the right competence to handle these situations. Preferably the most experienced employees should be chosen to work in this core-team. When aiming for parallel production the research has identified the importance of working with the same processes in every aspect in the transfer process as a fundamental factor for project success. It has been clearly expressed from the Chinese unit and also experienced by the authors when living in China that quality is not considered to be of greater importance than delivery. This is a big cultural difference compared to Sweden and should therefore be notified by the company on how to work with improving these perceptions.

Since the knowledge transfer is the most crucial part to manage in a transfer process, this supports the decision to choose the most experienced employees in the transfer core-team. This is a prerequisite that is necessary for creating an organizational culture that encourages and facilitates the creation, sharing and utilization of knowledge (Hillson, 2009). Further the personalized strategy should be used in a transfer process between China and Sweden rather than the codification strategy, since there are greater needs for face-to-face communication when cultures are distinctively different from each other. An increased and closer collaboration and communication with the Chinese employees who today in many aspects only transfer information to the Chinese PM and not directly to the Swedish engineers could be improved.

By creating a transfer core-team with experienced members and with the help of a personalized strategy including more face-to-face communication, this will hopefully stimulate the

knowledge transfer. The transfer core-team will be perceived as something special and exiting in the company and the members at both sides will feel more engaged in the process. This will create a partner relationship that is based on openness and transparency and a willingness to share knowledge and information. The members will also feel like they have grown and advanced in their career and are appreciated and important for the company. To better manage knowledge transfer across cultures, especially between China and Sweden it is important to understand the other side's cultural profiles. The transfer core-team should therefore get trained in the other partner's domestic culture.

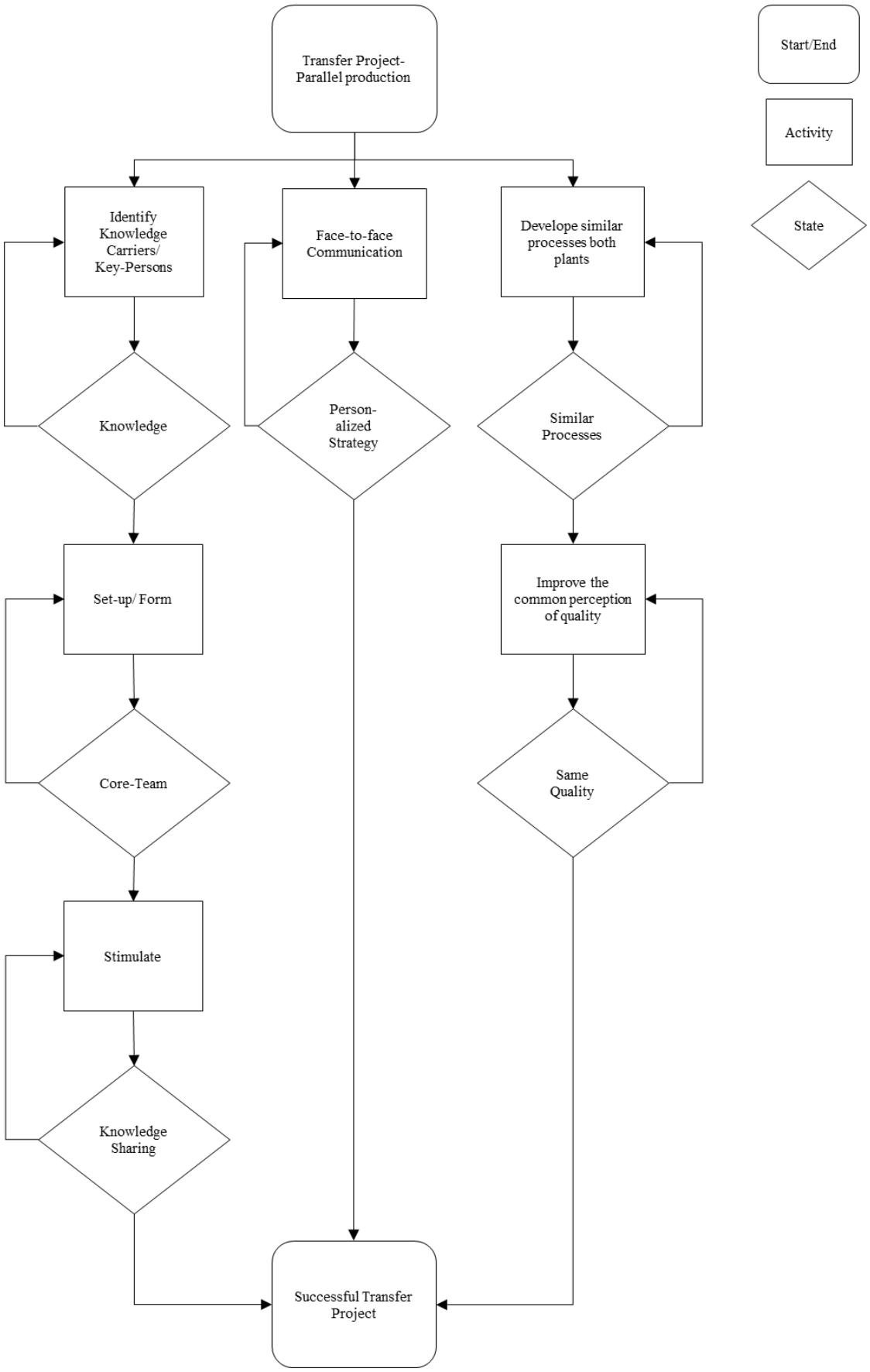


Figure 14 – Framework for a successful transfer project

7. Future Research

The purpose of this thesis was to answer the research questions, but also to explore what previous research had identified as important factors to consider when a company decides to offshore their business to another country and aiming for a parallel production. How could the transfer process of products, particular between Sweden and China be improved? The research has identified two areas of fundamental factors that should be considered if a company would like a successful transfer process, when working in transfer projects; knowledge transfer and having the same processes.

The literature review in this research has not been without difficulties as the authors have found out that the specific topic of "transfer projects" has not been widely explored in current research. The authors has therefor combined current research conducted in many different areas which is closely combined with the specific topic of transfer projects, such as; Offshoring, Knowledge Transfer, Knowledge Management and Project Management. One of the future recommendations for future Scholars and authors is there for to conduct further research in the specific topic of transfer projects since the authors believes this is very important to manage successfully to stay competitive and will be more common as the globalization constantly increases.

Further research can be carried out on how to best manage the transfer of knowledge when having an offshore strategy since this has been proven to be one fundamental factor in a successful transfer process. Finally, further research on how to create best practice of easy step-by-step and similar processes in all areas in the transfer process can be conducted by future scholars and authors.

8. References

Alavi, M., Kayworth, T.R. & Leidner, D.E., (2006). An Empirical Examination of the Influence of Organizational Culture on Knowledge Management Practices. *Journal of Management Information Systems*, 22(3), pp.191–224.

Andersson, L., & Karpaty, P., (2007). Offshoring and Relative Labor Demand in Swedish Firms. Orebro University, Swedish Business School, working paper, (5).

Argote, L., & Ingram, P., (2000). Knowledge Transfer: A Basis for Competitive Advantage in Firms. *Organizational Behavior and Human Decision Processes*, 82(1), pp.150–169.

Ash, J., (1998). Managing knowledge gives power. *Communication World, 15*(3), 23–26.

Aspelund, A. & Butsko, V., (2010). Small and middle-sized enterprises' offshoring production: A study of firm decisions and consequences. *Tijdschrift voor Economische en Sociale Geografie*, 101(3), pp.262–275.

Baden-Fuller, C., Targett, D. & Hunt, B., (2000). Outsourcing to Outmanoeuvre: Outsourcing Re-defines Competitive Strategy and Structure. *European Management Journal*, 18(3), pp.285–295.

Bahli, B., & Rivard, S., (2005). Validating measures of information technology outsourcing risk factors. *Omega The International Journal of Management Science*, 33(2), pp.175–187.

Banri, I., Ryuhei, W., & Eiichi, T., (2008). Offshoring and Productivity: Evidence from Japanese Firm-level Data. *Discussion papers*.

Barlett, C.A., & Ghoshal, S., (1999). Managing across borders: The transnational solution, (2), Boston, MA: Harvard Business School Press.

Barthelemy, J., & Geyer, D., (2001). IT outsourcing: Evidence from France and Germany. *European Management Journal*, 19(2), pp.195–202.

Belout, A., & Gauvreau, C., (2004). Factors influencing project success: The impact of human resource management. *International Journal of Project Management*, 22, pp.1–11.

Bierly, P.E., Damanpour, F., & Santoro, M.D., (2009). The application of external knowledge: Organizational conditions for exploration and exploitation. *Journal of Management Studies*, 46(3), pp.481–509.

Boddie, J., (1987). The project postmortem. *Computerworld*, 21(49), pp.77–82

Boland, R.J., & Citurs, A., (2001). Work as the making of time and space. *Sprouts: Working Papers on Information Environments, Systems and Organizations*, 2, pp.1–15.

Brelade, S., & Harman, C., (2000). Using human resources to put knowledge to work. *Knowledge Management Review*, 3(1), pp. 26-9.

Brusoni, S., Prencipe, A., & Salter, A., (1998). Mapping and Measuring Innovation in Project-based Firms., 46, pp.1–23.

Bunyaratavej, K., Hahn, E.D., & Doh, J.P., (2007). International offshoring of services: A parity study. *Journal of International Management*, 13(1), pp.7–21.

Cardon, P.W., & Scott, J.C., (2003). Chinese Business Face: Communication Behaviours and Teaching Approaches. *Business Communication Quarterly*, 66(4), pp.9–22.

Carmel, E., & Agarwal, R., (2002). The maturation of offshore sourcing of information technology work. *Information Systems Outsourcing (Second Edition): Enduring Themes, New Perspectives and Global Challenges*, 1(2), pp.65–77.

Case Company., (2015). *Establishing resources and working principles.*

Chen, G., & Chung, J., (1994). The impact of Confucianism on organizational communication. *Communication Quarterly*, 42(2), pp.93–105.

Chen, M., (2004). Asian Management Systems: Chinese, Japanese and Korean styles of business. Cengage Learning EMEA.

Clark, H.H., & Brennan, S.E., (1991). Grounding in communication., pp.222–233.

Contractor, F.J., Kumar, V., Kundu, S.K., & Pedersen, T., (2010). Reconceptualizing the Firm in a World of Outsourcing and Offshoring: The Organizational and Geographical Relocation of High-Value Company Functions. *Journal of Management Studies*, 47, pp.1417–1433.

Cramton, C.D., (2001). The Mutual Knowledge Problem and Its Consequences for Dispersed Collaboration. *Organization Science*, 12(3), pp.346–371.

Dachs, B., Ebersberger, B., Kinkel, S., & Waser, B.R., (2006). Offshoring of production - a European perspective. *Bulletin Number.*

Davenport, B.T.H., & Prusak, L., (2005). Working knowledge: how organizations manage what they know (Book Review). *IEEE Engineering Management Review*, 31(4), pp.1–15.

Davenport, T.H., & Klahr, P., (1998). Managing customer support knowledge. California Management Review, 40(3), pp.195–208.

Davis, C., & Naghavi, A., (2011). Offshoring production: A simple model of wages, productivity, and growth. *Economic Inquiry*, 49(2), pp.334–348.

Desouza, K.C., & Evaristo, J.R., (2004). Managing Knowledge in Distributed Projects. *Communications of the ACM*, 47(4), pp.87–91.

Dibbern, J., Winkler, J., & Heinzl, A., (2008). Explaining Variations in Client Extra Costs Between Software Projects Offshored to India. *MIS Quarterly*, 32(2), pp.333–366.

Disterer, G., (2002). Management of project knowledge and experiences. *Journal of Knowledge Management*, 6(5), pp.512–520.

Doh, J.P., Bunyaratavej, K., & Hahn, E.D., (2009). Separable but not equal: The location determinants of discrete services offshoring activities. *Journal of International Business Studies*, 40(6), pp.926–943.

Dunning, J.H., & Lundan, S.M., (2008). Multinational Enterprises and the Global Economy. Edward Elgar Publishing.

Dunning, J.H., (1988). Paradigm Of International Production: A Restatement and Some Possible Extensions. *Journal of International Business Studies*, 19(1), pp.1–31.

Dvir, D., (2005). Transferring projects to their final users: The effect of planning and preparations for commissioning on project success. *International Journal of Project Management*, 23, pp.257–265.

Dyer, J.H., & Nobeoka, K., (2000). Creating and managing a higher performance knowledge-sharing network: the Toyota case, pp.1–27.

Easterby-Smith, M., Malina, D., & Yuan, L., (1995). How culture-sensitive is HRM? A comparative analysis of practice in Chinese and UK companies. *International Journal of Human Resource Management*, 6(1), pp. 31-59.

Ekstedt, E., Lundin, R.A., Söderholm, A., & Wirdenius, H., (2003). Neo-Industrial Organising: Renewal by Action and Knowledge Formation in a Project-intensive Economy.

El-Kahal, S., (2001). Business in Asia Pacific. Oxford University Press, Oxford.

Fan, Y., (2002). Questioning guanxi: Definition, classification and implications. *International Business Review*, 11(5), pp.543–561.

Fixler, D.J., & Siegel, D., (1999). Outsourcing and productivity growth in services. *Structural Change and Economic Dynamics*, 10(2), pp.177–194.

Florida, R., & Kenney, M., (2000). Transfer and Replication of Organizational Capabilities: Japanese Transplant Organizations in the United States. *Nature & Dynamics of Organizational Capabilities*, pp.281–307.

Galegher, J., Kraut, R.E., & Egido, C., (2014). Intellectual Teamwork: Social and Technological Foundations of Cooperative Work. *Psychology Press.*

Glisby, M., & Holden, N., (2003). Contextual constraints in knowledge management theory : the cultural embeddedness of Nokaka´s Knowledge-creating Company. *Knowledge and Process Management*, 10(1), pp.29–36.

Graf, M., & Mudambi, S.M., (2005). The outsourcing of IT-enabled business processes: A conceptual model of the location decision. *Journal of International Management*, 11(2 SPEC. ISS.), pp.253–268.

Gubrium, J.F., & Holstein, J.A., (2002), *Handbook of Interview Research: Context & Method*, Thousand Oaks, CA: Sage Publications.

Hanisch, B., Lidner, F., Mueller, A., & Wald, A., (2009). Knowledge management in project environments. *Journal of Knowledge Management*, 13, pp.148–160.

Hansen, M.T., Nohria, N., & Tierney, T., (1999). What ' s Your Strategy for Managing Knowledge? *Harvard Business Review*, 72(2), pp.106–116.

Hansen, M.T., & Oetinger, B.V., (2001). Introducing t-shaped managers: Knowledge management's next generation. *Harvard Business Review*, 79(3), pp.107–116.

Hillson, D., (2009). Knowledge Transfer in Project-Based Organizations: An Organizational Culture Perspective. *Project Management*, 39(1), pp.7–15.

Hollenstein, H., (2005). Determinants of international activities: Are SMEs different? *Small Business Economics*, 24(5), pp.431–450.

House, R.J., Hanges, P.J., Javidan, M. Dorfman, P., & Gupta, V., (2004). Leadership, culture, and organizations: The GLOBE study of 62 societies. Thousand Oaks, CA: Sage Publications, Inc.

House, R.J., Hanges, P.J., Ruiz-Quintanilla, S.A., Dorfman, P.W., Javidan, M., Dickson, M.W., Gupta, V., (1999). Cultural influences on leadership and organizations: Project GLOBE. *Advances in global leadership*, *1*(2), 171-233.

Huo, Y.P., & Glinow, M.A. Von., (1995). On transplanting human resource practices to China: A culture-driven approach. *International Journal of Manpower*, 16(9), pp.3–15.

Hutzschenreuter, T., Lewin, A.Y. & Dresel, S., (2011). Governance modes for offshoring activities: A comparison of US and German firms. *International Business Review*, 20(3), pp.291–313.

Inkpen, A.C., (2000). Learning through joint ventures: A framework of knowledge aquisition. *The Journal of Management Studies*, 37(7), pp.1019–1043.

Inkpen, A.C., (1998). Learning and knowledge acquisition through international strategic alliances. *Academy of Management Perspectives*, 12(4), pp.69–80.

Inkpen, A.C. & Wang, P., (2006). An examination of collaboration and knowledge transfer: China-Singapore Suzhou industrial park. *Journal of Management Studies*, 43, pp.779–811.

Iverson, R.D. & Roy, P., (1994). A Causal Model of Behavioral Commitment: Evidence From a Study of Australian Blue-collar Employees. *Journal of Management*, 20(1), pp.15–41.

Javidan, M., Stahl, G.K., Brodbeck, F., & Wilderom, P.M., (2005). Cross-border transfer of knowledge: Cultural lessons from Project GLOBE. *Academy of Management Executive*, 19(2), pp.59–76.

Jensen, P.D.Ø., Larsen, M.M., & Pedersen, T., (2013). The organizational design of offshoring: Taking stock and moving forward. *Journal of International Management*, 19(4), pp.315–323.

Karlsson, C.E., (2009). *Researching Operations Management.* New York: Routledge.

Kealey, D.J., & Protheroe, D.R., (1996). The effectiveness of cross-cultural training for expatriates: An assessment of the literature on the issue. *International Journal of Intercultural Relations*, 20(2), pp.141–165.

Kedia, B.L., & Mukherjee, D., (2009). Understanding offshoring: A research framework based on disintegration, location and externalization advantages. *Journal of World Business*, 44, pp.250–261.

Kim, J.Y., & Nam, S.H., (1998). The Concept and Dynamics of Face: Implications for Organizational Behavior in Asia. *Organization Science*, 9(4), pp.522–534.

Kinkel, S., & Maloca, S., (2009). Drivers and antecedents of manufacturing offshoring and backshoring-A German perspective. *Journal of Purchasing and Supply Management*, 15(3), pp.154–165.

Kirchner, S. R., (1997). Focus on: Database integration and management for call centers. *Telemarketing, 16*(2), 22–24.

Kirkegaard, J.F., (2007). Offshoring, Outsourcing, and Production Relocation - Labor-Market Effects in the OECD Countries and Developing Asia. *Institute for international economics*.

Kogut, B., & Zander, U., (1992). 'Knowledge of the firm, combinative capabilities, and the replication of technology'. *Organization Science*, 3, 383–97.

Kotabe, M., (2015). The relationship between offshore sourcing and innovativeness of U.S. multinational firms: an empirical investigation. *Journal of International Business Studies*, 21(4), pp.623–638.

Kraut, R., & Egido, C., (1988). Patterns of Contact and Communication Collaboration in Scientific research collaboration. *In Proceedings of the 1988 ACM conference on Computer-supported cooperative work*, pp.1–12. ACM.

Kulkarni, U.R., Ravindran, S., & Freeze, R., (2007). A knowledge management success model: Theoretical development and empirical validation. *Journal of management information systems,* 23(3), pp.309–347.

Kumar, K., van Fenema, P.C., & von Glinow, M.A., (2009). Offshoring and the global distribution of work: Implications for task interdependence theory and practice. *Journal of International Business Studies*, 40, pp.642–667.

Kumar, N., (2002). Globalization and the quality of foreign direct investments. New Delhi: Oxford University Press.

Kumar, U., Kumar, V., Dutta, S., & Fantazy, K., (2007). State sponsored large scale technology transfer projects in a developing country context. *Journal of Technology Transfer*, 32(6), pp.629–644.

Lam, A., (1997). Embedded firms, embedded knowledge: Problems of collaboration and knowledge transfer in global cooperative ventures. Organization studies, 18(6), pp.973-996.

Lewin, A. Y., & Cuoto, V., (2006). Next Generation Offshoring: The Globalization of Innovation. Duke-Booz-Allen- Hamilton Offshoring Research Network Survey Report.

Lewin, A.Y., Massini, S., & Peeters, C., (2009). Why are companies offshoring innovation? The emerging global race for talent. *Journal of International Business Studies*, 40(8), pp.1406–1406.

Lewin, A.Y., & Peeters, C., (2006). Offshoring Work: Business Hype or the Onset of Fundamental Transformation? *Long Range Planning*, 39, pp.221–239.

Li, J., Kin, K.R., Tsui, A., & Hambrick, D.C., (1999). Building Effective International Joint Venture Leadership Teams in China. *Journal of World Business*, 34(1), pp.52–68.

Lin, X., & Germain, R., (1999). Predicting international joint venture interaction frequency in US-Chinese ventures, *Journal of International Marketing,* 7(2), pp.5-23.

Love, P.E.D., Fong, P.S., & Irani, Z., (2005). Management of Knowledge in Project Environments, Elsevier, Oxford.

Luo, Y., (1997). Guanxi: principles, philosophies, and implications, *Human Systems Management*, 16(1), pp. 43.

MacCarthy, B.L., & Atthirawong, W., (2003). Factors affecting location decisions in international operations – a Delphi study. *International Journal of Operations & Production Management,* 23(7), pp.794-818.

Madsen, E.S., Cheng, Y., & Liangsiri, J., (2008). Means for Transferring Knowledge in the Relocation of Manufacturing Units., In *13th Annual Cambridge International Manufacturing Symposium*. pp.1–15.

Manning, S., Massini, S., & Lewin, A.Y., (2008). A Dynamic Perspective on Next-Generation Offshoring: The Global Sourcing of Science and Engineering Talent. *Academy of Management Perspectives*, 22, pp.35–54.

Martinez, J.I., & Jarillo, J.C., (2015). The evolution of research on coordination mechanisms in multinational corporations. *Journal of International Business Studies*, 20(3), pp.489–514.

Massini, S., Perm-Ajchariyawong, N., & Lewin, A.Y., (2010). Role of Corporate-Wide Offshoring Strategy on Offshoring Drivers, Risks and Performance. *Industry & Innovation*, 17, pp.337–371.

Maxwell, J.A., (2013), Qualitative Research Design: An Interactive Approach, 3rd edition, Thousand Oaks, CA: Sage Publications.

Mefford, R.N., (2010). Offshoring, lean production and a sustainable global supply chain. *European Journal of International Management*, 4(3), p.303.

Meijboom, B., & Vos, B., (1997). International manufacturing and location decisions: balancing configuration and co-ordination aspects. *International Journal of Operations & Production Management*, 17(8), pp.790–805.

Meredith, J.R., & Mantel, S.J., (2009). Project Management-A managerial Approach (7. Edt.). John Wiley & Sons, Inc.

Merriam, S.B. (1988). *Fallstudien som forskningsmetod.* Lund: Studentlitteratur.

Meyerson, D., Weik, L., & Kramer, R., (1996). Swift trust and temporary groups. *Trust in Organizations: Frontiers of Theory and Research*. Sage, Thousand Oaks, CA, pp. 166-95.

Nielsen, B.B., (2005). The role of knowledge embeddedness in the creation of synergies in strategic alliances. *Journal of Business Research*, 58(9), pp.1194–1204.

Nonaka, I., & Takeuchi, H., (1995). The knowledge-creating company: How Japanese companies create the dynamics of innovation. London: Oxford University Press

Oshri, I., Van Fenema, P., & Kotlarsky, J., (2008). Knowledge transfer in globally distributed teams: The role of transactive memory. *Information Systems Journal*, 18, pp.593–616.

Patel, R., & Tebelius, A. (1987). *Grundbok I forskningsmetodik.* Lund: Studentlitteratur.

Prencipe, A. & Tell, F., (2001). Inter-project learning: Processes and outcomes of knowledge codification in project-based firms. *Research Policy*, 30(9), pp.1373–1394.

Prusak, L., (1997). Knowledge in Organizations: Resources for the knowledge-based economy. Oxford: Butterworth-Heinemann.

Roztocki, N., & Fjermestad, J., (2005). Offshoring Without Profit or the New Global Model ? , 2(2), pp.2–5.

Ruane, J.M. (2006). *A och O I samhällsforskning.* Lund: Studentlitteratur.

Sackmann, S.A, (1992). Culture and Subcultures: An Analysis of Organizational Knowledge. *Administrative Science Quarterly*, 37(1), pp.140–161.

Salmi, A., (2006). Organising international supplier relations: An exploratory study of Western purchasing in China. *Journal of Purchasing and Supply Management*, 12(4), pp.197–208.

Salmi, P., & Torkkeli, M., (2009). Success factors of interorganisational knowledge transfer: a case of a collaborative public-private R&D project. *International Journal of Business Innovation and Research*, 3(2), pp.109-125.

Schindler, M., & Eppler, M.J., (2003). Harvesting project knowledge: A review of project learning methods and success factors. *International Journal of Project Management*, 21(3), pp.219–228.

Seaman, C., Bent, R., Campbell, G., Miskin, D., & Unis, A., (2005). Business support systems and cultural diversity : a knowledge transfer partnership with a manufacturer of South Asian spicy foods.

Sergiovanni, T., & Corbally, J., (1984). Leadership and Organizational Culture, University of Chicago, Chicago, IL.

Simonin, B.L., (1999). Ambiguity and the process of knowledge transfer in strategic alliances. *Strategic Management Journal*, 20(7), pp.595–623.

Simonin, B.L., (2004). An empirical investigation of the process of knowledge transfer in international strategic alliances. *Journal of internatinal business studies*, 35(5), pp.407–427.

Skyrme, D.J., & Amidon, D.M., (1998). New Measures of success. *Journal of Business Strategy*, 19(1), pp.20–24.

Smite, D., & Wohlin, C., (2010). Software Product Transfers: Lessons Learned from a Case Study.

Smith, P., & Peterson, M., (1988). Leadership, Organizations and Culture: An Event Management Model, Sage, London.

Smolarski, J. & Wilner, N., (2005). Internationalisation of SMEs : A Micro-Economic Approach. *Journal of Business Chemistry*, 2(2).

Snider, K.F., & Nissen, M.E., (2003). Beyond the body of knowledge: A knowledge-flow approach to project management theory and practice. *Project Management Journal, 34*(2), pp.4–12.

Srikanth, K., & Puranam, P., (2011). integrating distributed work: comparing tast design, communication, and tacit coordination mechanisms. *Strategic Management Journal*, 32, pp.849–875.

Stahl, G., Björkman, I., & Vaara, E., (2004). National cultural differences and capability transfer in cross-border acquisitions. *Academy of Management Conference*, (33), pp.1–28.

Stata, R., (1989). Organizational learning—The key to management innovation. *Sloan Management Review*, 30(3), pp.63–74.

Stipek, D., Weiner, B., & Li, K., (1989). Testing Some Attribution-Emotion Relations in the People ' s Republic of China. *Journal of Personality and Social Psychology*, 56(I), pp.109–116.

Storper, M., & Venables, A.J., (2004). Buzz: Face-to-face contact and the urban economy. *Journal of Economic Geography*, 4(4), pp.351–370.

Thakur, P., (2010). Offshoring and Outsourcing of Core Corporate Activities : The Global Relocation of Pharmaceutical Industry Clinical Trials, pp.1–177.

UNCTAD., (2004). World Investment Report; The shift Towards Services. United Nations, New York.

Van Eenennaam, F., & Brouthers, K.D., (1996). Global relocation: High hopes and big risks! *Long Range Planning*, 29(1), pp.84–93.

Vestring, T., Rouse, T., & Reinert, U., (2005). Hedge your offshoring bets. *MIT Sloan Management Review*, 46(3), pp.27–29.

Vivek, S.D., Richey, R.G., & Dalela, V., (2009). A longitudinal examination of partnership governance in offshoring: A moving target. *Journal of World Business*, 44, pp.16–30.

Wang, Z.M., (1990). Culture, economic reform, and the role of industrial and organizational psychology in China. Handbook of Industrial and Organizational Psychology, Vol. 4, 2nd ed., Consulting Psychologists Press, Palo Alto, CA.

White, D., & Fortune, J., (2002). Current practice in project management — an empirical study. *International Journal of Project Management*, 20(1), pp.1–11.

Wohlin, C., (2011). Strategies Facilitating Software Product Transfers. *Software, IEEE*, *28*(5), pp.60-66.

Wong, K.Y., (2005). Critical success factors for implementing knowledge management in small and medium enterprises. *Industrial Management & Data Systems*, 105(3), pp.261–279.

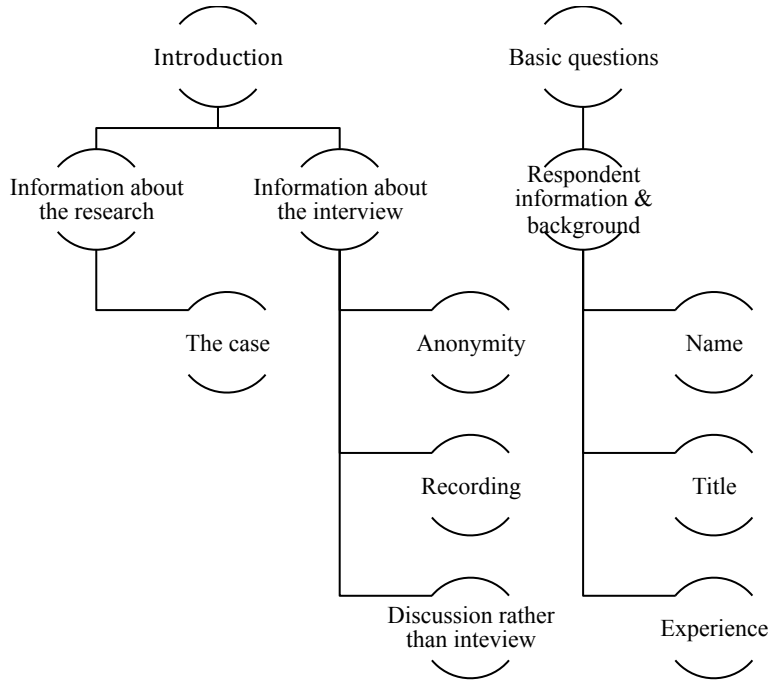
Xin Hua Dictionary., (2004), 10th ed., Commercial Press (Shang Wu Yin Shu Guan), Shanghai (in Chinese).

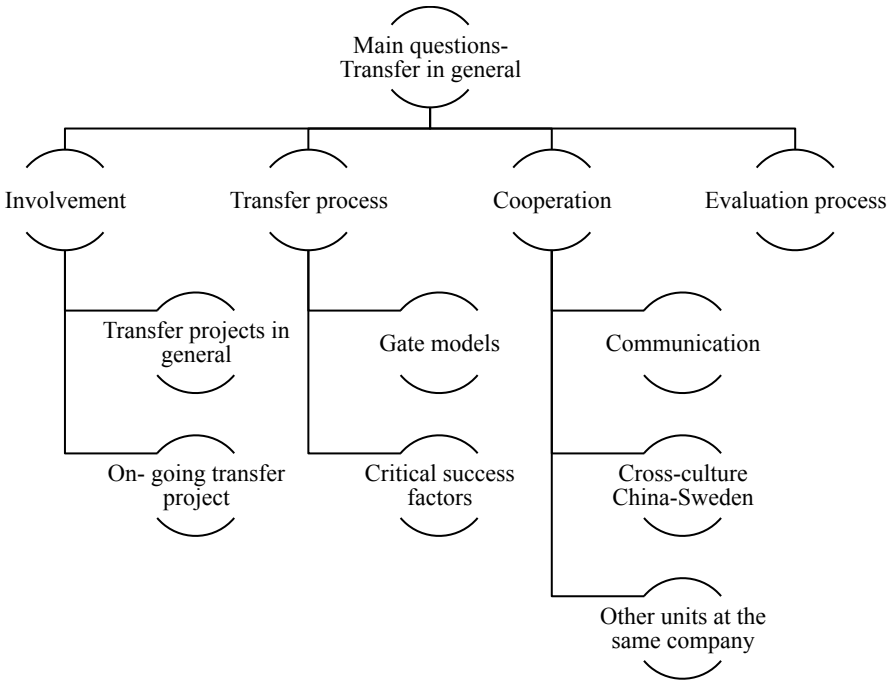
Yin, Robert K. (2006). *Fallstudier – Design och genomförande*. Malmö: Liber.

Youngdahl, W., & Ramaswamy, K., (2008). Offshoring knowledge and service work: A conceptual model and research agenda. *Journal of Operations Management*, 26, pp.212–221.

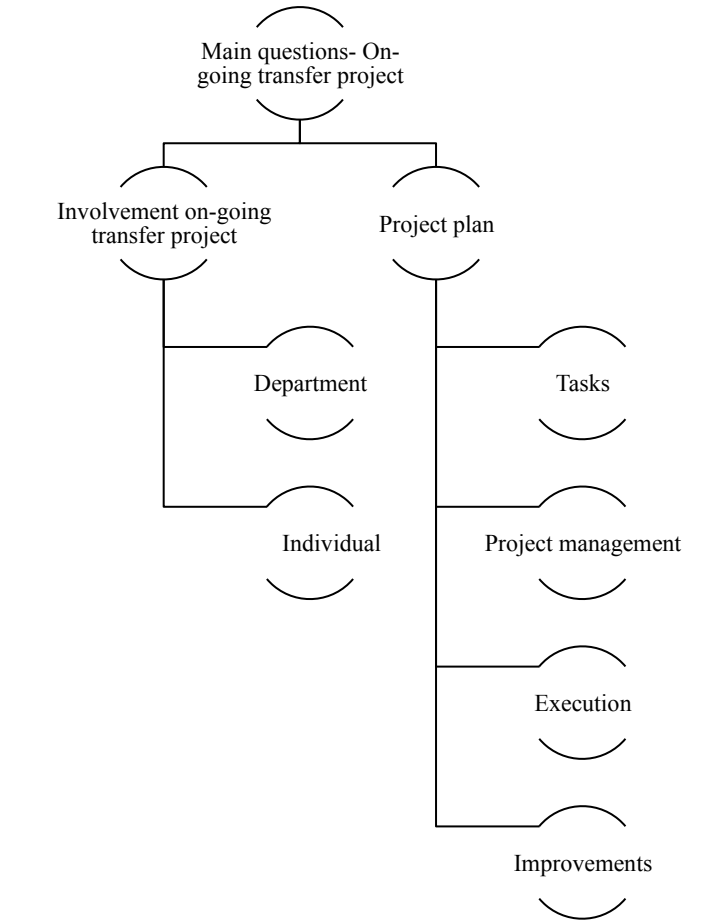
Youngdahl, W., Ramaswamy, K. & Verma, R., (2008). Exploring new research frontiers in offshoring knowledge and service processes. *Journal of Operations Management*, 26(2), pp.135–140.

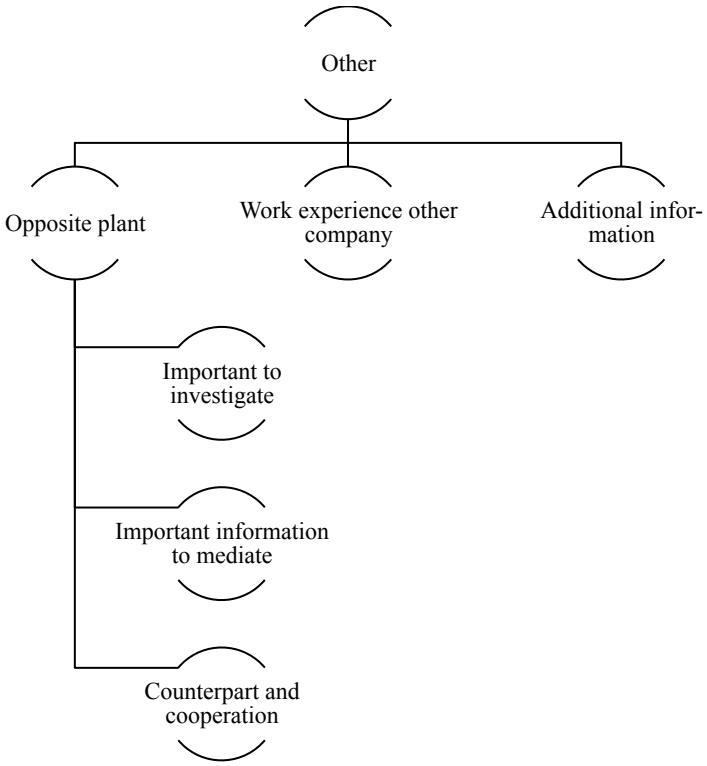
APPENDIX 1 – INTERVIEW TOPICS





APPENDIX 2 – INTERVIEW TOPICS





APPENDIX 3 – STEERING DOCUMENT (Confidential)