IT-OUTSOURCING TO CHINA
– IN WHAT WAY CAN ICT HELP MANAGE CHALLENGES?

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Abstract
The purpose of the study was to explore the current IT-outsourcing situation in China, find out what challenges exist and figure out ways of managing these challenges with the help of ICT.

To achieve the purpose of the study a case study was performed in Shanghai, China. The case study was built around several interviews with the representatives of three IT-Outsourcing companies that work globally from Shanghai, China. All of the companies that were involved in the process of conducting the study were big established companies that are experts in their respective field. All of the interviewees were either from a management part of the company or selected by the management to represent their companies in the interviews.

The study was performed with a qualitative research approach and was divided into a theoretical section where the current IT-Outsourcing situation was displayed and thereby the theoretical challenges were presented. This presented a need for verification on the theoretical elements and also created information gaps that needed to be filled by conducting an empirical study.

The empirical study was then built around the gaps that needed to be filled in order for ICT to become an even more efficient enabler for IT-Outsourcing. Thereby four semi-structured interviews were conducted with three different companies. With the help of the theoretical and empirical studies an analytic approach were applied to then answer the research questions that are directly connected to the purpose of the study, making it possible to identify the challenges that needed to be addressed and mapping the current IT-outsourcing situation in China. These challenges then addressed and displayed in six different tables with an explanatory text attached to each table for further validation and clarification on the table content.

Based on the findings, the research could then be validated with a theoretical and empirical analysis that gave grounds for the conclusions that part take in answering the research questions that give ground for the purpose of the study.

Keywords: IT-Outsourcing, Challenges, ICT, Virtual collaboration, Developing countries, IT-Infrastructure, China.
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# Table of Contents

1. **Introduction** .......................................................................................................................... - 1 -
   1.1 Background ........................................................................................................................... - 1 -
   1.2 Research Overview .............................................................................................................. - 2 -
   1.3 Problem Discussion ........................................................................................................... - 4 -
   1.4 Purpose ............................................................................................................................... - 5 -
   1.5 Expected Results ................................................................................................................... - 6 -
   1.6 Target Audience ................................................................................................................... - 6 -
   1.7 Outline ................................................................................................................................ - 7 -

2. **Research Design** ..................................................................................................................... - 9 -
   2.1 Research strategy ................................................................................................................ - 9 -
   2.2 Research process .................................................................................................................. - 9 -
   2.3 Research methods ............................................................................................................... - 12 -
      2.3.1 Data collection methods ................................................................................................. - 12 -
      2.3.2 Evaluation Strategies .................................................................................................... - 14 -

3. **Theoretical Framework** ......................................................................................................... - 15 -
   3.1 ICT an enabler for better business ...................................................................................... - 15 -
      3.1.1 What is ICT? ................................................................................................................... - 15 -
      3.1.2 Motivations for using ICT ............................................................................................. - 15 -
      3.1.3 How ICT enables the relations for IT-Outsourcing ......................................................... - 16 -
   3.2 IT-Outsourcing ...................................................................................................................... - 17 -
      3.2.1 Definition ....................................................................................................................... - 17 -
      3.2.2 Possibilities .................................................................................................................... - 18 -
      3.2.3 Challenges with IT-Outsourcing ..................................................................................... - 18 -
   3.3 IT-Business with Developing Countries .............................................................................. - 21 -
      3.3.1 IT-Infrastructure Development ....................................................................................... - 21 -
      3.3.2 Well educated people and salaries ............................................................................... - 22 -
      3.3.3 ICT a tool for economic growth and success ............................................................... - 23 -
   3.4 Virtual Collaboration ......................................................................................................... - 23 -
      3.4.1 Definition ....................................................................................................................... - 23 -
      3.4.2 Developing a successful Virtual Collaboration ............................................................ - 24 -
      3.4.3 Virtual Collaboration enhances Outsourcing ............................................................... - 26 -
      3.4.4 Risks with Virtual Collaboration .................................................................................... - 26 -
3.5 Conclusions from the Theoretical study .......................................................... - 27 -
3.6 Motives for performing an Empirical Study .................................................. - 28 -
4. Empirical Study .................................................................................................. - 30 -
  4.1 Swedish Consulting and IT-Outsourcing Company ........................................... - 30 -
    4.1.1 Company co-Founder / Corporate Operating Officer ............................... - 30 -
    4.1.2 Shanghai Office co-worker ....................................................................... - 35 -
  4.2 Chinese Consultant and IT-Outsourcing Company ........................................... - 37 -
  4.3 Chinese IT-Outsourcing Company .................................................................. - 41 -
5. Analysis ............................................................................................................. - 44 -
  5.1 Research Analysis ......................................................................................... - 44 -
    5.1.1 Research analysis design and methods ..................................................... - 44 -
    5.1.2 Research Analysis in action ..................................................................... - 45 -
  5.2 Comparative Analysis ................................................................................... - 45 -
    5.2.2 Comparative Analysis Tables .................................................................. - 49 -
    5.2.3 Overview of acting methods ................................................................. - 57 -
  5.3 Theoretical Analysis ..................................................................................... - 58 -
6. Discussion ......................................................................................................... - 63 -
  6.1 Contributions to the field of Informatics ...................................................... - 63 -
  6.2 Contributions to the fields of Practice ............................................................. - 64 -
7. Conclusions, Evaluation and Further research ................................................... - 66 -
  7.1 Conclusions .................................................................................................... - 66 -
  7.2 Limitations ..................................................................................................... - 67 -
  7.3 Suggestions for Further Research ................................................................. - 68 -
References: .......................................................................................................... - 69 -
Appendix. Interview Questions ............................................................................. - 73 -
List of Tables
Table 3.1: Internet usage and population statistics worldwide........................................ - 21 -
Table 3.2: Average Salary for Logistics and Communication employees 2008 in SEK... - 23 -
Table 3.3: Characteristics and Examples of different types of Virtual Collaboration........ - 24 -
Table 3.4: Important theoretical conclusions................................................................. - 28 -
Table 5.1: What software to use..................................................................................... - 50 -
Table 5.2: Unclear customer requests............................................................................. - 51 -
Table 5.3: Flaws in the IT-Infrastructure.......................................................................... - 52 -
Table 5.4: Inability to reach the customer when needed through software.................... - 53 -
Table 5.5: Business language barriers........................................................................... - 55 -
Table 5.6: Hesitation to outsource based on feelings of losing control........................... - 56 -
Table 5.7: ICT; Theoretical, Empirical, Similarities and Differences............................... - 58 -
Table 5.8: IT-Outsourcing; Theoretical, Empirical, Similarities and Differences............... - 60 -
Table 5.9: Challenges; Theoretical, Empirical, Similarities and Differences.................... - 61 -

List of Figures
Figure 1.1: IT-Outsourcing. Percent (%) Growth Worldwide per sector year 2005-2006... - 2 -
Figure 1.2: Number of Natural Science and Engineering University Graduates 1998-2008 - 3 -
Figure 2.1 Research Process illustration....................................................................... - 11 -
Figure 3.1: ICT as an enabler....................................................................................... - 16 -
Figure 3.2: Simplified IT-Outsourcing illustration....................................................... - 17 -
Figure 3.3: Steps to strive for a successful business cooperation................................... - 20 -
Figure 3.4: First university degrees, by selected region/country: 2008 or latest data ....... - 22 -
Figure 3.5: Illustration of how to establish a successful Virtual Collaboration............... - 25 -
Figure 5.1: Research Analysis in action....................................................................... - 45 -
Figure 5.2: Overview of challenges.............................................................................. - 49 -
Figure 5.3: Overview of acting methods....................................................................... - 57 -
1. Introduction

1.1 Background

In recent times companies have been outsourcing their IT more to decrease the costs of projects, one of the reasons being that salaries are less in developing countries than in westernized countries (Economies, 2012).

More companies are considering IT-Outsourcing as an option because of the economic benefits it brings (Pfannenstein and Tsai, 2004). China is in current time one of the bigger countries to outsource the IT to. Because of the well educated people and that the salaries are in fact lower, it makes it one of the most popular choices to establish IT-Outsourcing into (Sahay, et. al., 2003).

Even though it’s cheaper, it can lead to more projects being unable to fulfill the requirements or even worse being cancelled. Because of the distance between the countries, it makes it harder to communicate, which will lead to misunderstandings and could lead to delays or wrong outcomes (Rao, 2004).

In the beginning of September 2012 we were in Shanghai China, to study at University of Shanghai for Science and Technology. We discovered very soon that communication is a major issue between Chinese locals and visitors therefore misunderstandings is a common occurrence. This even though the majority of Chinese locals speak English rather well, however as both the language gap and cultural differences stack up, the communication problems occur because of a lack of understanding from both sides.

Therefore we started to search for information regarding these issues and found it to be an even bigger challenge than we first realized. One article that made a major impact on our view when we first started the literature review was from a professor named Qiu Wang (2012). He stated that in recent times there had been a lot of misunderstandings, trust issues and communications challenges between partner companies involved in different transactions. China has potential to become a country to count on when it comes to the future of IT-Outsourcing and the potential is rapidly increasing (Overby, 2011). If these challenges can be managed accordingly, maybe even the best nation.

One of the reasons for the explosion with IT-Outsourcing to China has been of the Governments act to improve the IT-Infrastructure in the country (Geng and Hu, 2011). Predictions have been made that with this rapid growth in business, China will pass India, which is the largest supplier of IT-Outsourcing services. But with such a fast growth, more challenges can occur (Sahay, et. al., 2003).

Hence the very well educated people and an IT-Infrastructure that is being improved constantly in China, there needs to be clarifications of the challenges in the IT-Outsourcing field. First when this is managed, knowledge and understanding can be made between cooperating companies and the business collaboration can work successfully.
1.2 Research Overview

The definition of IT-Outsourcing relies on one company signing contracts with another company to handle the IT of their organization. The IT which is going to be outsourced are then handled by the contract company, the so called Service provider (Economies, 2012). In recent times more companies are establishing IT-Outsourcing. Customer companies want to focus on their core business, instead of spending money on an in-house IT-organization. This has been more popular due to the important economic benefits it brings (Pfannenstein and Tsai, 2004). Reports has clarified that all sectors defined as IT-outsourcing are increasing every year (Economies, 2012). See figure 1.

Figure 1.1: IT-Outsourcing. Percent (%) Growth Worldwide per sector year 2005-2006.

The country where most companies are establishing their IT-outsourcing to is India. But in recent times more companies have been looking to establish their outsourcing in China. One reason for that is that a Chinese salary for a worker is lower than in India (Sahay, et. al., 2003), another part has been that the Chinese Government has invested a great deal of money and time to enhance the institutions for Science and Technology (Huang, et. al., 2004). One part of these institutions covers the IT-Infrastructure enhancement that has been done. The constantly enhanced IT-infrastructure has led China to become a more interesting choice for establishing IT-outsourcing connections with (Sahay, et. al., 2003).
Since China is a country with over 1 billion people inhabitants are there a lot of manpower. Over 400 000 people are working with IT-outsourcing in China, many of them holding a higher education in their respective fields (Sahay, et. al., 2003). A fact that has been making China a competitive choice to establish IT-Outsourcing business with because of their well educated people and more expecting to graduate, making the Chinese people very well educated in the IT-sector (Board, 2012).

The University graduates in Natural Science sector include Computer Science which is one subject that is relevant with IT-Outsourcing. The Engineering sector in higher education includes Computer-Engineering, which is also a subject related to IT-Outsourcing. From 1998 to 2008, the number of Natural Science graduates had increased from about 55 000 to almost 300 000 and also about 180 000 to about 700 000 engineering graduates per year, in China only. See figure 2.

However even with all the well educated people and manpower working in the IT-field across China there is always risks when considering IT-Outsourcing offshore (Tafti, 2005). When IT is outsourced, there is a major loss of expertise and knowledge about the firms IT-systems in the local organization. Main part of the people having expertise knowledge in a company’s IT-system may be forced to leave, since their work has been outsourced. The expertise and knowledge loss is only one of many risks companies have to be observant about when facing the challenges that exist when it comes to outsourcing their IT sectors or parts of it. Therefore there is a great need for risk analysis (Tafti, 2005).

Outsourcing software is one part of IT-outsourcing that can become a risk when it comes to
cross-cultural collaboration. This has been determined by Krishna, et. al. (2004) when they evaluated the software outsourcing businesses between westernized and developing countries in a five-year long study. People around the world work and communicate differently in order to establish their connection with each other.

Where Sweden is reckoned as a westernized country and China a developing country, the actual IT-business process could in fact become troublesome between the countries due to the cultural-crossing. Software outsourcing from westernized countries to developing countries such as China and India has been an important IT-outsourcing business for over 20 years. IT has been of great economic interest for both supplier and client side (Krishna, et. al., 2004). Even though more companies tend to outsource software it must be more observant strategies when it comes to choosing which country and company one are going to outsource the business to (Krishna, et. al., 2004). The more cross-cultural differences the countries face, the more risky and difficult it tends to be to establish an optimal work process. To understand the cross-cultural differences between the countries and companies involved, there needs to be an active observation from management (Krishna, et. al., 2004).

Reports have been showing that it’s more common for companies worldwide to outsource their IT, both offshore and onshore (Economies, 2012). China is one of the countries where outsourcing has been growing rapidly (Sahay, et. al., 2003). With a fast growth, risks can be even higher and since reports show that English language skills are weak and understanding of the western business culture is subpar, the risk factor increases (Sahay, et. al., 2003).

The thesis shall focus more towards the social aspects of communication, interactions between people, organizations and in what way Information Communication Technology (ICT) can be involved to make the cooperation more efficient. With this being said, the facts stated above constitute that the subject is very current within the Informatics sector.

1.3 Problem Discussion

As stated in the research overview reports have shown that there are challenges when considering IT-Outsourcing. Especially when the outsourcing is planned to take place in a country where the culture difference is high and communication/work processes are nothing alike the current methods used for the company in question. Krishna, et. al. (2004) are only one example of a long study that states companies needs to think twice before considering IT-outsourcing when facing cultural and communication differences.

Hence these statements, more companies, which have been established in western countries, tend to establish IT-outsourcing in China (Sahay, et. al., 2003).

With this in mind there must be something positive and economically gainful from the business partnership IT-outsourcing brings, however there is need for extra caution when a rapid growth is eminent. In what way can companies increase their business value regarding IT-outsourcing, for both parties involved? Instead of causing challenges, companies should gain more value from each other. More understanding needs to take place between the countries and companies for this to become a reality. In what way can these challenges get sorted out? In what way can the challenges be managed with the help of ICT?
With the big workforce, well educated people working in the field and the economic benefits IT-outsourcing to China brings, there is no doubt it is being major interests for companies to establish business connections within China. As IT-outsourcing is getting more and more popular, it becomes more and more crucial to manage the challenges, for further growth in the evolution and globalization that outsourcing brings (Aspray, et. al., 2006).

A lot of the material we have access to so far and our own personal experiences from being in China have led down a similar path, that there is a lot of potential for growth, but there is a lack of knowledge that is needed to help make this growth a possibility especially when it comes to reaching its full potential. It is important to figure out how the outsourcing between China and other countries are currently working, therefore there is needed to view earlier researches that has been made. Hence it is also important to explore the literature that has debated the various issues that occur when outsourcing is present. On top of this, nothing is more crucial than actual experience with the companies to compare real life activity to literature to be able to render a conclusion about the subject and problem at hand.

With all this being said, the question at hand would present itself as the following:

**RQ1: What is the current status with IT-outsourcing to China in relation to ICT and what challenges exist? How can these challenges be managed with the help of ICT?**

To easier answer the main question we have created these sub-questions:

RQ1.1: What is the current IT-outsourcing status in China?
RQ1.2: What causes the challenges?
RQ1.3: In what way can ICT help manage these challenges?

### 1.4 Purpose

The Swedish government has realized that China is becoming a more important country to make business cooperation with. The government made it clear of this since they took act in late 2012 that students in Sweden shall have the opportunity to learn the Chinese language in Swedish schools (Regeringen, 2012). Hence making China a more influenced country for students, the government in Sweden is looking into new ways to establish more cooperative ways of work with companies based in China. As China is becoming one of the leading economies in the world today (Regeringen, 2012), there needs to become less of a risk to establish business together. In order to take care of obstacles that could be in the way for the corporations to work efficiently, one of the study’s purposes are to evaluate what challenges exist in the IT-Outsourcing field and in what way ICT can manage these.

The focus will be on the communication, cultural differences and difficulties between outsourcing companies in Sweden and China and in what way ICT can be involved to make the cooperation be more effective.

With the results from the research it should be manageable to enhance the business results when establishing IT-Outsourcing to China. Even though Sweden and China are the cases for this study, the advices should also be applicable for other countries in similar situations as these countries.
Furthermore our purpose with the study is to showcase how the subject is up to-date regarding Informatics which makes the report more focused towards the people in organizations whom are in the IT-Outsourcing field. China is evolving and has invested a lot of money on their infrastructures to become the best option for a company when it comes to IT-outsourcing. The report shall therefore serve as a way of mapping how the current situation is operating IT-outsourcing to China and general work processes within the involved corporations, then use this together with previously written literature on the subject to draw real life conclusions of actual events. Once this is done, the possibility to analyze problems becomes a reality and the fusion of these factors will lead to a better blueprint on how things will improve in this sector. Thereby helping the Chinese development to grow further, creating more jobs and opportunities to become a more global country in the IT-Business field.

1.5 Expected Results

The information we have gathered so far has pointed towards the fact that there are gaps in a system that can get improved. Therefore we expect the results to both present some of these gaps and thereby we can conclude how these gaps could eventually get filled. An important aspect that we expect shall become a big factor in our results is the mapping of how processes within the organization are running. In order for the results to validate the theories on why and how these processes can get improved.

We feel that the fields we expect to have relevance to IT-outsourcing efficiency can have a large radius, but is also in some way connected. Therefore these various fields could come to present themselves as differentiating threads which in turn we expect shall to certain degree make the possibility of isolating various problems a reality.

With all of this being said, we can conclude that we expect our results to consist of mapping of current activities and also conclusions and theories on how these activities can get improved to work in a better and more efficient manner.

1.6 Target Audience

The target audience for this study will be focused on companies who are considering IT-outsourcing to China or are currently outsourcing IT to China. This is relevant to them because it will make them more secure on why they would choose or have chosen to outsource IT to companies in China. To find out how they can work together with the Chinese people in the most efficient way possible within IT-outsourcing field. Another focus will be how businesses can get enhanced in their partnership and how they can collaborate in the best way possible with each other even though they have different ways of doing business.

Further on a target audience will be SIDA (Swedish International Development Agency) who has brought development cooperation with China since 1979. This partnership exists to expand global opportunities and connections to China (SIDA, 2009).
Since the study also will be applicable to other countries than Sweden when it comes to IT-outsourcing, the study will in turn indirectly to cover IT-business with China from companies located in other westernized country as well making them a target audience for our case.

Regarding academic purposes this report is aimed towards the Informatics subject and it shall be applicable in what way ICT can manage challenges. The depth of the study covers different suppliers of IT-Outsourcing, therefore it could be relevant for further studies with another perspective of IT-Outsourcing.

1.7 Outline

Chapter 1 - Introduction.
The first chapter starts off to introduce the background of the area to the reader. From there it’s followed by a research overview, which gives the reader presentations of earlier research and motivations for the selected research. This is followed by a problem discussion where it is discussed about the research area chosen, after that follows the purpose with the study, expected results and presentations of the target audience for the study.

The purpose of the introduction section is to present an introduction to the research area and motivate why it’s necessary to conduct the study.

Chapter 2 - Research Design.
The second chapter presents the research design for the study. It starts by presenting how we will conduct our research strategy. After this the research process is described and presented. It follows with describing the methods being used to conduct the research; these sections are research methods and data collection methods. The chapter ends presenting the evaluation strategies for the study.

The main purpose of this chapter is to describe in what way the study has been conducted.

Chapter 3 - Theoretical Framework.
The third chapter gives the reader the theoretical aspects of the study. It presents theories chosen that was highly relevant to conduct the study. It starts with describing in what way ICT enables a better business, continues with IT-Outsourcing perspectives, from there IT-Business with developing countries and then addresses virtual collaboration. The chapter ends with conclusions gathered from the theories brought up and gives motivations for conducting an empirical study.

It serves to present a theoretical overview of the study and aims to validate the findings in the study.

Chapter 4 - Empirical Study.
The fourth chapter presents a summary of the empirical material that has been collected.

Short information about each case is presented at the start of each section and the aim is to present the empirical findings for the reader.
**Chapter 5 - Analysis.**
The fifth chapter delivers a comparative analysis concerning the cases that has been presented in the fourth chapter. After this comparative analysis tables have been presented with the challenges found. In order to establish maximum traceability and understanding, every challenge are presented in an own table with a short text explanation beneath.

Further on in the chapter a theoretical analysis is shown with three tables, to present similarities and differences between the theoretical aspects and the empirical findings.

The purpose of this chapter is to analyze the findings and compare it to each other, in order to see if there are any challenges at hand.

**Chapter 6 - Discussions.**
The sixth chapter serves to discuss the findings in a larger context, what the study contributes in the field of Informatics and to the field of Practice. It is discussed in what way the earlier chapters contribute to these fields.

The purpose of this chapter is therefore to find out if there has been or can be any contributions to the fields of Informatics and field of practice with the findings made.

**Chapter 7 – Conclusions, Evaluation and Further Research**
The seventh chapter displays the conclusions of the thesis in a manner that it refers to the research questions as its baseline and points to where the research questions are answered throughout the thesis, thereby concluding the results.

This is followed by a section of limitations to evaluate the limits on the thesis, followed by suggestions for further research.
2. Research Design

2.1 Research strategy

In order to clarify the problems in IT outsourcing, we need to gain knowledge of the subject. We need to pursue knowledge and explain concepts to interpret the subject in the right way (Goldkuhl, 2011). To conduct our research questions in the right way means that we should listen to people with experience and knowledge of the relevant fields. With our knowledge of the problem-area and our research questions, we will be able to listen, be present and reflect on how their knowledge in the field can contribute to improvement (Goldkuhl, 2011).

The knowledge we want to reach with this thesis is supposed to be rewarding for companies and people who work in the industry. It could be needed in order to understand the challenges, and to change the attitudes and practices for the different companies, to establish a desirable end result. To achieve this there might be a need to establish new ways of thinking and new ways of working together. It is to be described as value knowledge (Goldkuhl, 2011). There is a goal to strive for, a desired result. This result is to make it work better, cause increased financial gain, it is to explain the need for how it should work (Goldkuhl, 2011).

To get answers for the knowledge requirements, the required methodological approach and resources needs have to be planned for the study (Goldkuhl, 2011). It is therefore important to carefully review what data there needs to be included in the study to establish our knowledge of the subject, thereby we can be sure that we interpreted the problems accordingly. So we can reach the goal that we strive for.

2.2 Research process

Our research process began when we were in China 2012. We noticed that there were communication problems, misunderstandings between us and the local Computer Science students at the university we were studying at. We knew that China is one of the major IT-outsourcing nations. As IT-outsourcing creates a global world, expanding the job opportunities and enhances the relationships between nations, we felt the need to know if the business was working in an efficient manner. Do people working in the field perhaps experience communication problems like we experienced?

We needed more information about IT-outsourcing and started to search the internet for articles and earlier research in relevant areas. Many articles read stated that there could be complications in IT-outsourcing businesses.

Most of the search for literature was done via Google Scholar. Using keywords like “IT-Outsourcing”, “IT Outsourcing challenges”, “IT outsourcing china”, “IT outsourcing problems”, we could see that there was a large selection of books and articles based upon the subject in question.
In order to find the most relevant information, we tried to select the various literatures that had been cited most times before by other researchers, hence trying to ensure the most reliable sources we could. With the help of the literature that we found, we could then get an overview of what previous researchers had based their work on.

We saw that there were possibilities for further research regarding IT-outsourcing in China as a case study.

Therefore we saw opportunities to choose and base our research on the challenges that exist in China. The case study could be applied to challenges between other countries that provide IT-Outsourcing. The reason we chose China was because we saw that there were challenges in the area, there is literature on the subject, but very few studies have been based in China in particular. Another reason was that Sweden wants to expand their contacts with China and contributed that the research felt current to conduct.

The next thing to consider about the research was that the literature we had found could be used to form our processed research questions. How can we connect our research to informatics? With the help of discussions with each other we saw the potential case related to the field of ICT (Information Communication Technology) and how ICT can be contributory to review challenges.

With well formulated research questions, it was now time to search for theory on the subject. We used databases that were available through the University of Borås, including Summon, IEEEExplore, ACM and also searches through Google Scholar. With the help of these searching through the databases and sites we, received material available to us so that we could go ahead and analyze these theories.

With a solid theoretical background, we could begin writing questions to the companies we were going to interview. We interviewed companies that worked differently, where by it was interesting to see how their answers and approaches differed. The method used was semi-structured interviews which made a positive and important impact for us to be able to ask follow-up questions and deepen the responses (Bryman & Bell, 2011).

When the questions were done, it was time to determine the interview meetings with the companies. Interviews were conducted with people who had worked with IT-Outsourcing for several years and had good insight in this area. Since we conducted interviews from three different companies and that their working culture differed very much, made it interesting for us to see the challenges from their perspectives.

By analyzing the results we got from the interviews we could with our knowledge, look at what the different companies considered to be challenging to work with. In the theories that were developed, we could see how the different corporates culture and working methods differed. With the response we analyzed and processed the results. We could now validate and put us into the research questions.

With our knowledge in the area and analyzed and validated results from the interviews and theories, we could process our research questions and give solid tips and advices for better understanding of the challenges. See figure 2.1.
Figure 2.1 Research Process illustration.
2.3 Research methods

Our method consists of gathering information from literature as a starting point to get a good understanding of how others have grasped the previous concepts of outsourcing and getting well informed about the subject in question. The literature will be used steadily throughout the process to both compare and analyze different points of views on our findings. We feel as if a qualitative process is needed as a lot of our findings will be based on interviews, this in order to get the report to become more valid (Bryman & Bell, 2011).

The next important step is to gather information from companies in Sweden and China, conduct interviews and field studies in terms of actual interaction and viewing of the work processes in order to make the report a reality. As the cultural differences and language barriers serve as a major hindrance, we will make sure to state how these differences have affected the business relationships and how they can get improved. We feel that outsourcing in its current state has incredible potential, but to reach this potential either one or both sides has to adapt in certain ways to reach a mutual point of great success.

With both the information we gather from literature and real life experiences that come from being out at the field, we will be able to compare the two in an analytical way that will give us unique point of view on the subject, which is critical for the success of the project (Bryman & Bell, 2011).

Since we have a good understanding on how organizations work, and how they can become more effective, we feel that we will be able to use the knowledge that we have received from our studies throughout our university period as an important asset. We will state every theory that we use as a reference and the reasoning behind these theories, also why they are important in our case.

We will also gather information and statistics about how well outsourcing is going in China. With this information we will be able to compare and evaluate data about how the companies were working before the outsourcing occurred and how things are going at the moment. This is useful since we will get a broader point of view on how outsourcing has affected the companies (Sahay, et. al., 2003).

The information that we gather, which we feel is relevant for the report will be stated and analyzed in order to prove our theories and act as a concrete backbone of the reasoning behind the statements.

2.3.1 Data collection methods

Country

We have focused our research on China since we have experience from the country and had the possibility to establish connections with people and companies that are relevant for our study. Another factor that is important for our research was the fact that China is one of the biggest IT-Outsourcing nations and has the potential of even further growth (Sahay, et. al., 2003).
Above this Jan Björklund, Minister for Education in Sweden stated in December 2012, that China have more influence in the world, their economy is constantly increasing very rapidly (Regeringen, 2012). Jan Björklund stated that it is of the utmost interest for Sweden to expand its contacts within the country. In order to be able to expand the cooperation between companies in these countries (Sverigesradio, 2012). This makes China an important country for Sweden regarding the understanding of this topic.

Companies
To gain credibility in our report, we will conduct interviews with people working in companies that are doing IT-outsourcing business. It will be carried out from three different companies' perspectives, which will add further credibility. It provides a broader perspective on how the situation looks and how challenges can be stated and hopefully resolved in the future.

Interviews
The data collection method we used was interviews with people who have experience working in the field, with the use of interview-questions that we constructed before the sessions. The interviews are thereby so called semi-structured interviews. Because of the flexibility, that they were open ended and followed a pattern. The respondents have the possibility to give us reflections and deeper answers based on their thoughts about the subject.

A positive thing with structuring up semi-structured interviews are that we have possibilities to ask follow up questions that are relevant with the respondents answers will make the interviews more reliable and valid for us (Bryman & Bell, 2011).

We let the respondents answer from their own perspective from the area. The questions that were asked were easy to understand for the involved and they could feel that it was manageable to answer the questions properly, without to share sensitive information about the company or their own involvement in the field.

Under the interviews we had to pay great attention to what the respondent was saying, this way we could ask in-depth questions about why things were certain ways. The interviews were therefore recorded. The recordings gave us the possibility to listen to the interviews again, which gave us the chance to clarify that we interpreted the interviews right the first time (Bryman & Bell, 2011). Transcription was done as close to the interviews as possible to establish for ourselves that nothing was misunderstood. By doing this we could transcribe them as accurate as possible and that made the substance of validity high for our report (Bryman & Bell, 2011).

Interview Persons
The people interviewed are working in larger companies based in China, providing outsourcing of the IT sector. These People have influence within their respective companies and has extensive knowledge in the field. Their knowledge has great relevance for the study.

We got in touch with these people because of their knowledge and roles in the companies, which had big influence on the study. The sampling that was made when choosing participants for the interviews, were followed by a pattern that is explained by Bryman & Bell (2011) and they call this choice theoretical sampling. Our choice was based upon this because the persons involved have great knowledge about the area and they could see by themselves
the issues that we present them. We felt that with these persons at hand a theoretical sampling could give the study more substance and validity.

2.3.2 Evaluation Strategies

With the choices made of doing a qualitative approach with interviews, we will establish the best result possible to make the substance of great value, reliability and validity.

To establish interviews we see the problem situation through the respondents’ eyes, which can make it less reliable than if we would have done participant observations (Bryman & Bell, 2011). But considering that we establish contact with people having a good insight, interviews are the best choice for us to get a result that can be helpful for a broader understanding in the area.

In order to get the validity and reliability in the report as high as possible it is important for us that we contact people with a great knowledge about the area, record the interviews and do the transcriptions with the answers fresh in mind (Bryman & Bell, 2011).

Reliability and Validity

High reliability and validity are elements that are needed to establish a high quality research in the qualitative research segment (Bryman & Bell, 2011). Validity has the meaning for us to establish whether we are observing, identifying or measuring the respondents’ thoughts and draw conclusions about what this (Bryman & Bell, 2011). Reliability has then the meaning to make these thoughts as reliable in the study as possible, we need to make sure the respondents are involved in the area and have the knowledge that they state.

Credibility

With credibility as a measure in the study, we have searched to establish that the research beholds an actual and interesting subject for the social world. Our research findings shall therefore include results that can be usable for improvement in the area and gain positive feedback from involved respondents (Bryman & Bell, 2011). This will improve the study's validity for our respondents.

Generalizability

To reach as high generalizability as possible, we contacted people with great insight in the problem area, they have worked long in relevant areas and have established a lot of knowledge (Bryman & Bell, 2011). To establish semi-structured interviews in a qualitative research we can more efficient than with a quantitative research, compare the theory we have presented with what the respondents say about the problem area (Bryman & Bell, 2011).

Transparency

Achieving transparency in qualitative research can sometimes be difficult. As researchers we have to reach a reliable conclusion in the best way and selecting participants for the interviews carefully is very important (Bryman & Bell, 2011).

We selected participants with great insight and knowledge in the problem area and also the ability to respond as reliably as possible to make our research achieve high transparency (Bryman & Bell, 2011).
3. Theoretical Framework

As this chapter is our theoretical framework, the various theories which are relevant from an academic theory perspective from previously written studies are presented as a baseline. This serves as the theoretical validation throughout the study.

3.1 ICT enabler for better business

3.1.1 What is ICT?

ICT stands for Information and Communications Technology. As the name indicates, this is the study of using technology to process information and support communication. As this is highly relevant to outsourcing Kakabadse, et. al. (2005) talk about how ICT is being used by companies for its cost cutting benefits and the competitive advantages it brings.

ICT can be seen as different divided parts that have several variations of functions depending on the need that needs to be handled, these needs cover several important factors for a company, such as statistics on how the company is functioning, the economy of the company or its employee information. Companies have been known for using ICT to major effect on various important parts of the organizations management sectors, such as for example; structural, financial and planning techniques (Kakabadse, et. al., 2005).

3.1.2 Motivations for using ICT

ICT is an important aspect for a company, in order to expand its knowledge and reach out to a more global business market (Hendrics, 1999). To easier share and get in touch with important knowledge and the ability of establishing connections globally makes companies more internationalized and prepared to tackle new markets (Hendrics, 1999). This reports that Companies which have business contacts and knowledge about international business can further strive towards new markets Global communication is often established and performed through ICT, via different virtual collaboration channels.

In order for companies to share knowledge internally, Hendrics (1999) points out that a good idea is to set up an Intranet. With an Intranet the involved parties can discuss ideas, view progress of the work and give feedback.

Galloway and Mochrie (2005) describe how ICT is an important channel to communicate through when it comes to business. If more business is done via ICT it can become easier to find and handle more customers, suppliers and also make it easier to communicate with these parties through ICT. Galloway and Mochrie (2005) further states that ICT enhances the value and extends an improvement of the supply chain. A company can be more flexible with finding suppliers as ICT can be used to find a reliable supplier and lower the costs. This enables the company to become more competitive worldwide, and has become very important for companies since ICT makes it so that they can perform effective negotiation of service.
costs. For developing countries ICT builds business trust between nations, enhancing the economy and creates more jobs (Galloway and Mochre, 2005).

Offshore IT-outsourcing is one business that is building bridges between nations worldwide. The communication between companies goes beyond continents in this type of business. To make Offshoring possible, ICT must be working properly between the cooperating companies (Abramovsky and Griffith, 2006).

ICT enables a competitive and cost-effective IT-outsourcing business. For a company it is one way to lower the IT costs, but also a way to get international connections (Sako, 2005). IT-outsourcing has been growing rapidly since the 1990s. Reasons for IT-Outsourcing becoming more familiar are due to the facts of the fast improvements and development of ICT (Sako, 2005). Sako (2005) describes how there is cost-effective and easy to establish connections between Countries in different continents, the communication is now only a telephone call, e-mail, chat or audio-video conference away. Further Sako (2005) states that the developments of ICT through the years have made the costs significantly lower. This makes Offshore IT-outsourcing an even more reliable solution.

3.1.3 How ICT enables the relations for IT-Outsourcing

Figure 3.1: ICT as an enabler.
3.2 IT-Outsourcing

3.2.1 Definition

A representative explanation of outsourcing is when a company wants to contract an activity or parts of the internal organization, to an external supplier in exchange for payment. Usually this contract extends over a certain time period (Augustson, 1999).

To get a clearer picture about what IT-Outsourcing specifically means, Kishore, Rao, Nam, Rajagopalan & Chaudhury (2003) drafted a good definition as follows:

"the contracting of various information systems functions such as managing of data centers, operations, hardware support, software maintenance, network, and even application development to outside service providers”

In order to easier understand this definition a simplified IT-Outsourcing illustration can be seen below (Figure 3.1).

![Figure 3.1: Simplified IT-Outsourcing illustration.](image)

Further there are three different types of outsourcing that are based on which location a company chooses to outsource. These are called onshore-, nearshore- and offshore outsourcing.

The use of onshore outsourcing means that a company decides to contract one or several parts of the internal organization to an external company based in the same country as the internal company in question is located.
The nearshore definition is when a company decides to not establish the outsourcing in the same country, but instead to a country nearby, which can provide less cost but still may bring a good quality of service in terms of good knowledge and expertise in the area.

With offshore outsourcing a company decides to contract the activities to a country in a different continent and time-zone in order to gain the benefits of low-costs and still have workers with great qualifications that can provide good quality in the area that is getting outsourced (Augustson, 1999).

3.2.2 Possibilities

To hire an internal IT-Organization can be costly and this is where outsourcing can be helpful to lower the costs. The economic benefits are usually one of the primary reasons for when a company considers outsourcing IT activities, but usually not the only reason (Sparrow, 2003).

Sparrow (2003) describes how outsourcing makes it possible to enhance the core competence. When outsourcing an activity, a company could rely on talented people from another firm to take care of other activities that could become time consuming, thereby hindering further core competence development. By outsourcing the time consuming activities, a company can focus on their core competence, which is the competence the company do best and can therefore establish a closer connection to the customers, which would in turn enhance their main business. With a closer and better connection to the customer the company can then act more flexible to make sure the customer is satisfied.

Sparrow (2003) further talks about how outsourcing extends a company’s global skills, when successful establishments of global business have been concluded, there will be gain in terms of understanding on the differences in the ways of doing things. This will be beneficial for the company in terms of more global understanding in their respective fields.

As companies realize the economic benefits and also the importance that IT brings, more are looking at outsourcing as an attractive option in this particular field. The possibility to hire expert personnel to manage their IT could be beneficial and a good option to consider (Sparrow, 2003).

3.2.3 Challenges with IT-Outsourcing

To contract an activity or parts of an organization can be risky. There should always be careful planning and consideration about if establishing IT-outsourcing for one’s company is a good strategy or not.

Sparrow (2003) concludes that there should be more factors than simply economic benefits that a company should have as goals before IT-outsourcing. Sparrow (2003) points out that reports have shown decisions that were founded on only economic benefits leading to less success, than companies that have considered more factors before outsourcing for reasoning behind outsourcing.

Unforeseen costs have been a common occurrence when it comes to IT-Outsourcing. Usually outsourcing contracts are signed on a 5-10 year basis and under this time a lot of changes are highly probable to occur. Perhaps the company for example has the ability to expand their
business. In order to expand they need to change the agreement and enhance the contract of the IT-Outsourcing business, which may in turn lead to high cost (Sparrow, 2003). Signing away all of the intended IT-Outsourcing to one supplier can become a major risk and the company can become dependent on that one supplier. This makes it so that the company gets in a lesser position to negotiate further deals. Sparrow (2003) describes this matter and points out that this could become very risky and costly. Further on this can make it hard to negotiate with new potential suppliers since the internal technical expertise has been lost and the company is locked in to the expertise of the previous supplier.

As the internal expertise can be lost, due to the company having to fire talented employees because of the IT-Outsourcing choice, another risk presents itself. If few or no people at all have expertise about the IT which is used. The impact of a lacking internal expertise creates an effect that there always needs to be involvement from the supplier for even minor errors, this would lead to even more dependency to the supplier (Sparrow, 2003).

On top of these facts there needs to be a certain understanding about everyone differing as individuals to certain extents. Depending on how and where you grew up, what your beliefs are, what values you have, what role you have in the professional life. People draw different conclusions, think, work and communicate differently, this is culture (Hofstede, 1994). This can be especially critical when it comes to offshore IT-Outsourcing. Through cultural values people perceives things differently. When things are perceived differently there is need for clarification and to reach an understanding of how it is interpreted (DuPraw and Axner, 1997). Cultural differences will always exist.

In order to reach an understanding of the different culture values there needs to be a mutual knowledge about the culture differences between the parties in question (Hofstede, 1994). It is only when this is successfully established that there can be a successful and efficient business collaboration (DuPraw and Axner, 1997).

DuPraw and Axner (1997) have through their study established some principles that should be taken notice of. When doing business where cultural differences are at large, misunderstandings can prove to be fatal for a successful cooperation. The communication between people is something that is very important to establish. It is a must to communicate together and interpretation cannot fail. Sometimes this can prove to be very difficult. Even if the language barriers are none and both of the countries are speaking English as their native tongue for example, there still are differences, words have different meanings in different countries. Between countries which don’t share the native tongue the language barrier can be even tougher to handle.

Further on DuPraw and Axner (1997) points out that conflicts differ all over the world, in some cultures raising your voice very loud is considered humiliating for the respondent and can become a risk for the business cooperation, while in other countries is a very common trait and common to do.

In some countries decisions are made by one single person and in others by a group of people. The way of decision making varies in different countries and cultures (DuPraw and Axner, 1997). In order not to make mistakes and being considered as ignorant it becomes essential to be aware of these facts.
For some cultures it is important to obtain a good relationship in the beginning of the business transaction, for there to be a successful business establishment. While in other cultures it is more important for relationships to be developed as the project goes on (DuPraw and Axner, 1997).

Positive aspects that successful cross cultural business will bring are the experiences of making people more tolerant to cultural misunderstandings. A wider perspective is received and cultural understandings will become easier to achieve. To understand and be prepared on the differences between cultures, can reduce the impact of cultural shock and expand the cultural experiences (Moran, et. al., 2007).

To easier achieve these benefits and enhance the business value there exists a need for companies to be open-minded about the cultural differences. To be oblivious about these differences could turn out to be disastrous (Moran, et. al., 2007).

![Image of a chart showing steps to strive for a successful business cooperation.](chart.png)

Figure 3.3: Steps to strive for a successful business cooperation. Adapted from Willcocks and Cullen, (2012).

Figure 3.2 has been made to show the important steps that have been brought up to avoid challenges regarding the choice of outsourcing IT-activities. The illustration points out that the way of reaching a successful cooperation does not go straightforward, there can be obstacles but in order to solve them there needs to be a gaining of trust with each other.
3.3 IT-Business with Developing Countries

3.3.1 IT-Infrastructure Development

Internet as a communication tool is becoming more necessary for countries and companies worldwide, the IT-Infrastructures is constantly being developed all the time to meet future demands. More people get access to internet daily because of the improvements being made (Stats, 2012).

Since year 2000 internet usage growth has been over 560%, globally. In year 2012 nearly 35% of the world’s inhabitants had internet access (see table 3.1).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>1 073 380 925</td>
<td>4 514 400</td>
<td>167 335 676</td>
<td>3 606,7 %</td>
</tr>
<tr>
<td>Asia</td>
<td>3 922 066 987</td>
<td>114 304 000</td>
<td>1 076 681 059</td>
<td>841,9 %</td>
</tr>
<tr>
<td>Europe</td>
<td>820 918 446</td>
<td>105 096 093</td>
<td>518 512 109</td>
<td>393,4 %</td>
</tr>
<tr>
<td>Middle East</td>
<td>223 608 203</td>
<td>3 284 800</td>
<td>90 000 455</td>
<td>2 639,9 %</td>
</tr>
<tr>
<td>North America</td>
<td>348 280 154</td>
<td>108 096 800</td>
<td>273 785 413</td>
<td>153,3 %</td>
</tr>
<tr>
<td>Latin America / Caribbean</td>
<td>593 688 638</td>
<td>18 068 919</td>
<td>254 915 745</td>
<td>1 310,8 %</td>
</tr>
<tr>
<td>Oceania / Australia</td>
<td>35 903 569</td>
<td>7 620 480</td>
<td>24 287 919</td>
<td>218,7 %</td>
</tr>
<tr>
<td><strong>WORLD TOTAL</strong></td>
<td><strong>7 017 846 922</strong></td>
<td><strong>360 985 492</strong></td>
<td><strong>2 405 518 376</strong></td>
<td><strong>566,4 %</strong></td>
</tr>
</tbody>
</table>

Table 3.1: Internet usage and population statistics worldwide.
Source: http://www.internetworldstats.com/stats.htm

Table 3.1 illustrates that internet access has been significantly improved all over the world and more people have the possibility to use internet now than year 2000. The continents where most people have gained access to internet since 2000 have been in many developing countries (Stats, 2013). Internet access and the IT-Infrastructure in developing countries have been lacking in quality, but has since 2000 and forth been built up in a rapid speed (Chinn and Fairlie, 2010). This has led to more people having the possibility to access internet.

This case-study is based on China which is one of the countries where there has been major improvement on the IT-Infrastructure. The reason behind these improvements have been the Chinese Government investing a lot of time and money to build up the institutions for Science and Technology, where one part consists of the IT-Infrastructure (Huang, et. al., 2004). A more reliable IT-Infrastructure has made China a more competitive option to establish business relations with (Sahay, et. al., 2003).
3.3.2 Well educated people and salaries

China is one of the biggest countries in the world, with over 1 billion citizens. It is declared being a developing country because of the wage gaps, some people earn less than 2 US dollar a day (Glaeser, 2013).

Qu and Brocklehurst (2003) describes the Chinese high education sector to be growing all the time, by year 2002 there were 1 008 000 graduates and by 2008 there were 1 589 000 graduates which makes a great improvement in just a couple of years (see figure 3.3). A big competitive workforce makes China a Country where companies’ consider China to be a more reliable choice when it comes to making business cooperation’s with.

Source: Science and Engineering indicators 2012, Figure O-8, http://www.nfs.gov/statistics/seind12/figures.htm
Figure 3.4: First university degrees, by selected region/country: 2008 or latest data

Another motivation for establishing business connections with China is because of the lower salaries than in other Countries. Qu and Brocklehurst (2003) states that a salary in China is almost equal to India which is the biggest IT-Outsourcing nation, but compared to salaries in Sweden the salaries in China are significantly lower (see Table 3.2).
### 3.3.3 ICT a tool for economic growth and success

The possibilities of more high educated people and further growth of the IT-Infrastructure are leading developing countries in the right way to economic growth (Gholami, et. al., 2010). With more educated people and constant improvement of the IT-Infrastructure, the potential of profits from ICT can be acclaimed (Gholami, et. al., 2010). This describes how it can be more beneficial for companies to provide business relations to a developing country. Particularly in countries where there are people that have a high education, experience in the area and the IT-Infrastructure is being enhanced in quality constantly. Therefore developing countries where the government is actively acting for improved, better and more people having the possibility for education, are considered to be a less risk to do business with (Gholami, et. al., 2010).

### 3.4 Virtual Collaboration

#### 3.4.1 Definition

That business is done more globally has led to the need for development of new methods of communication between companies. One concept is called virtual collaboration. Virtual collaboration enables a more efficient communication method with the help of ICT and makes it more flexible for companies to reach out to each other (Hossain and Wigand, 2004).

Instead of people having to travel around the world establishing face-to-face communication to do business, virtual collaboration has made it possible to have audio conferences, video conferences or computer-mediated-communications between companies (Wainfan and Davis, 2005).

To get a definition what virtual collaboration is and how to be used, an adapted table from Wainfan and Davis (2005) (table 3.3) can be seen.
<table>
<thead>
<tr>
<th>Type:</th>
<th>Characteristics:</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video conference</td>
<td>Real-time images and voices of participants. Can include text-chat, possibility to share data.</td>
<td>Videoconferencing in group or personal.</td>
</tr>
<tr>
<td>Audio conference</td>
<td>Communication via voice of participants. Can include text-chat, possibility to share data.</td>
<td>Phone calls, conference calls.</td>
</tr>
<tr>
<td>Computer-mediated-communication</td>
<td>Images, text and other data received via computer. No real-time voice or video.</td>
<td>E-mail, forums, text message, chat rooms.</td>
</tr>
</tbody>
</table>

Table 3.3: Characteristics and Examples of different types of Virtual Collaboration. Adapted from Wainfan and Davies (2005).

### 3.4.2 Developing a successful Virtual collaboration

As the internet infrastructures constantly is getting developed, virtual collaboration becomes more and more of an important factor for companies which are doing business on international fronts. Virtual collaboration opens possibilities for faster response time, improved communication methods and is greatly moneysaving (Wainfan & Davis, 2005).

In order to establish a successful business through virtual collaboration there is a need for the involved companies to gather knowledge about each other. Moser (2013) describes how virtual communication methods can create new challenges due to the developments of communication and the loss of direct contact between co-workers. Moser (2013) describes how difficulties can occur with virtual communication that needs to be managed. To communicate via computer-mediated collaboration there can be obstacles. The way people chat and write e-mails through computers differ and could easily be interpreted offensively or wrong for the counterpart. Further on Moser (2013) points out how face-to-face communication needs more time to establish and creates great value, but can feel more reliable.

Hence in order to develop a successful virtual collaboration Moser (2013) describes certain steps that need to be fulfilled. First of all there needs to be set solid rules from the start of the virtual collaboration, this in order to assure that everyone interpret the dialog the correct way and uses the same communication channels. As the rules are being set there needs to be gain an understanding and reach for a mix of the different corporations cultures in the matter of how employees behave and communicate with each other.

Moser (2013) further points out that in order to reach the goal of a successful collaboration the corporations needs to gain trust in each other and in cases where it could be a high contrast in business culture that causes errors need different degrees of the virtual
communication. To keep different grades of virtual communication defines switching between virtual communication methods and face-to-face communication (Moser, 2013).

As these important steps are managed, a successful virtual collaboration can successfully be established and this is called a virtual organization. This due to the importance of the well managed virtual collaboration and efficient cooperation that has been sorted out (Hossain and Wigand, 2004).

In order to reach trust between virtual cooperation’s Vakola and Wilson (2004) describes a few steps that are necessary to handle correctly. The first step is for the companies are to listen, learn and gain the ability to share information about each other. Further it is necessary to gather knowledge about the culture and working differences, in that manner one can establish an acceptance that people and companies all over the world work in different ways.

From a successful implementation of these steps the companies can continue to establish what their common goals are between their cooperation and reach a successful business together (Vakola and Wilson, 2004). See Figure 3.5.

![Figure 3.5: Illustration of how to establish a successful Virtual Collaboration.](image)

With a successful virtual collaboration the possibilities increases to gain an efficient work-outcome and increases the knowledge of how companies shall work together worldwide (Hossain and Wigand, 2004).

With knowledge about how to develop successful virtual collaboration between companies in the theory aspects we could get a broader point of view in what way companies can establish successful business collaboration with the requirements to communicate via ICT systems.
3.4.3 Virtual Collaboration enhances Outsourcing

ICT has opened new ways of globalization for companies worldwide. It has been opening the possibilities to easier compete in a worldwide market. The possibilities to extend the markets for companies and countries have been beneficial for every country in the world (Siakas and Balstrup, 2006).

However to gain successful global business there is need for development of more flexible communication methods and insights of the differences that will appear (Siakas and Balstrup, 2006).

Virtual Collaboration has made it possible to easier reach out for companies with need of fast and flexible communication. It has made it easier to communicate at any hour even though the time-zones can differ between the countries where the companies are located (Siakas and Balstrup, 2006). An example can be seen with e-mails that can be sent whenever needed, to later be replied by the counterpart when they have time. Virtual collaboration has opened up to new boundaries in how organizations can be reached, making it easier to establish a global connection (Siakas and Balstrup, 2006).

Outsourcing business presents the need for companies to supply their customers with information about how the project is forthcoming. The enhancements with the help of virtual collaboration has made it possible to easy, efficient and fast give the data to the customer. Via audio- or video conference the communication reports can be more socially and easier discussed while the use of other computer-mediated communication tools such as e-mail etc can easier be used to send data and statistics about the project (Moser, 2013).

3.4.4 Risks with Virtual Collaboration

Even if virtual collaboration brings opportunities to make a company more global, there are also risks and challenges that a company needs to be aware of.

It is a known fact that different people have different interests and understandings, this applies also for technology. To be able to use different types of virtual communications there is a need for understanding the technology behind it. For people with little or no knowledge about the area it can become a risk factor. Risk such as less than adequate use can lead to appointments being delayed or even missed. As there are several people and different companies involved a delayed or missed conference call can have major implications between the business collaboration. This could perhaps even lead to termination of the possible business cooperation.

To handle these issues, companies can arrange courses for the employees, in how to use the software.

Chinn and Fairlie (2010) describes how there has been a huge development with the IT-Infrastructures that still is forth going in rapid speed. Although even though this huge
development, there is still need and room for extensive building of the IT-Infrastructure (Chinn and Fairlie, 2010).

With the lack of a good infrastructure there are risks that the electric, internet access and telecommunications do not meet consistent quality.

This suggests that the infrastructure for instance can be unusable for a period of time. An infrastructure that doesn’t meet the consistent quality can force conference calls to get delayed, inconsistent, misunderstood, missed or unable to be fulfilled (Dethier and Moore, 2012). If this is the case, then business deals might become less possible to occur.

3.5 Conclusions from the Theoretical study

As it is important for us to strive for knowledge about how ICT enables new successful business possibilities, it was critical for us to gain the knowledge about how ICT functions and relates with the involved companies. Therefore this became a big aspect of what we first focused on.

The theoretical study has helped us gain knowledge of the important aspects which involves ICT as a tool for IT-Outsourcing cooperation. To get a broader understanding of how ICT manages IT-Outsourcing it was important for our study to enlighten the cooperation possibilities and challenges between the involved parts. Further we concluded that we needed knowledge about how and why to do IT-business collaboration with developing countries, since our study is motivated on business with China the knowledge needed to be more focused towards that country.

When we gained the extended knowledge about how ICT enhances IT-Outsourcing business and why China is a preferable option to manage business with we needed the understanding of how one could establish ICT communication-methods and what communication-methods were possible.

Therefore we needed a broader understanding about what virtual collaboration is, how to establish a successful cooperation with virtual collaboration and what the possible risk with this type of ICT is.

With all of the important knowledge at hand we gained a broader understanding of the factors involved to establish effective business cooperation, where ICT worked as the main part of this. With the knowledge gained we could then strive for new understandings in the area and it became clear that there was a need for an empirical study to get conducted.

With all of the important knowledge at hand we gained a broader understanding of the factors involved to establish effective business cooperation, where ICT worked as the main part of this. With the knowledge gained we could then strive for new understandings in the area and it became clear that there was a need for an empirical study to get conducted. Below a table has been made to summarize important theoretical conclusions in a structured way.
<table>
<thead>
<tr>
<th>Theoretical Conclusion</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>ICT enhances the work when conducting global business. <em>(please concur section 3.1.2 Motivations for using ICT)</em></td>
</tr>
<tr>
<td>C2</td>
<td>Knowledge shared through specific portals enhances the project progression. <em>(please concur section 3.1.2 Motivations for using ICT)</em></td>
</tr>
<tr>
<td>C3</td>
<td>ICT enables smooth business appointments via Virtual Collaboration. <em>(please concur section 3.1.2 Motivations for using ICT and 3.4.2 Developing a successful Virtual Collaboration)</em></td>
</tr>
<tr>
<td>C4</td>
<td>ICT enables economic benefits for Developing countries. <em>(please concur section 3.3.3 ICT a tool for economic growth and success)</em></td>
</tr>
<tr>
<td>C5</td>
<td>IT-Outsourcing has been growing significantly because of enhanced ICT. <em>(please concur section 3.1.2 Motivations for using ICT)</em></td>
</tr>
<tr>
<td>C6</td>
<td>Offshore IT-Outsourcing provides high quality work to lower costs. <em>(please concur section 3.2 IT-Outsourcing)</em></td>
</tr>
<tr>
<td>C7</td>
<td>IT-Outsourcing manage to make companies focus more on their core competence. <em>(please concur section 3.2 IT-Outsourcing)</em></td>
</tr>
<tr>
<td>C8</td>
<td>Challenges in business-language barriers. <em>(please concur section 3.2.3 Challenges with IT-Outsourcing)</em></td>
</tr>
<tr>
<td>C9</td>
<td>Knowledge about cultural differences in global business. <em>(please concur section 3.2.3 Challenges with IT-Outsourcing)</em></td>
</tr>
<tr>
<td>C10</td>
<td>Important business decisions in different cultures are made by different level of management. <em>(please concur section 3.2.3 Challenges with IT-Outsourcing)</em></td>
</tr>
<tr>
<td>C11</td>
<td>IT-Infrastructure has been extensively enhanced the last years. <em>(please concur section 3.3.1 IT-Infrastructure Development)</em></td>
</tr>
</tbody>
</table>

Table 3.4: Important theoretical conclusions.

### 3.6 Motives for performing an Empirical Study

From gathering the information in the previous sections of this rapport, we can conclude that even though there is a lot of good information on the subject, there is still a lack of knowledge on different areas. This gap of knowledge is hence the reason to why we need to conduct an empirical study on the subject. This is to be conducted with the help of interviews and analysis *(see appendix Interview Questions)*. Therefore there needs to be a clear understanding to what questions we need to ask and why, in the interviews, so that they can get analyzed correctly for accurate results.

First of all it will be important to establish a baseline of questions that will lead to information about the subject and his/her company. These questions are needed for a better general understanding of the subject and his/her company's role, responsibilities, processes and experience in the field.

Once a clear general understanding on why this person and why the company in question is relevant to our rapport is established, we need to broaden the question range and focus on the factors that have presented themselves as missing gaps of knowledge in the previous theoretical framework that has led to our empirical study to get performed.
A more detailed framework description needs to be presented when it comes to work process. Questions about how the company operates on a more detailed level, customer contact, challenges with customer expectations, cultural difficulties and how various challenges on all these mentioned factors can get solved according to the subjects’ expertise. These questions need to be focused on the outsourcing aspects in relation to ICT.

For a better understanding of the virtual collaboration aspects which is directly related to ICT and outsourcing, there is a clear need to establish questions based on how virtual collaboration is currently being used by the subject and the company as a whole both internally within the company and externally towards the customer. Once this has been established it will become necessary to ask questions about what virtual collaboration methods work best for them, their opinion on the subject, what flaws they have noticed and how they think these flaws can get handled.

These questions become relevant not only from the aspect that they will provide answers to gaps in the theoretical framework, but also from the perspective that they will show what facts can get confirmed to be similar or faulty between the two different theoretical aspects and empirical aspects, the symbiosis that this creates will present a updated information framework that can later be used as the main core of our research.
4. Empirical Study

In this chapter the compilations of interviews made with IT-Outsourcing related companies are presented. The chapter starts with a Swedish company´s point of view in conducting IT-Outsourcing in China and follows with Chinese companies´ words about the business.

4.1 Swedish Consulting and IT-Outsourcing Company

The following section contains a summary of 2 interviews conducted with a Swedish IT-Consultant / Corporate Operating Officer and his co-worker in Shanghai. GL and AS are working for a Swedish company doing IT-Outsourcing business to Scandinavian clients from China. The company’s IT-Outsourcing is focused on different kinds of Software testing.

4.1.1 Company co-Founder / Corporate Operating Officer

The first interviewee is GL which is the CO-Founder of the company. He has wide experience from working in China for several years.

GL describes that he has been working with IT-Business since 1998 and within China since 2007. The first year in China he was working as an expatriate for a Swedish company. After working in China for almost a year the Swedish company couldn’t extend GL’s contract and wanted him to return to Sweden. GL had during his year in China enjoyed it so much that he didn’t want to leave. 2008 he contacted two of his friends that were located in Lund, Sweden at that time, he told them that he wanted to start an IT-company and they all decided to start one together, focusing the company on IT-testing. The office in Lund is currently primarily performing consultant business while the Shanghai office where GL is working, is conducting IT-Outsourcing operations in the form of software testing.

GL wanted to have the office in Shanghai for several reasons. During his time in China he had gained good business connections and the understanding that Shanghai was the place where most people in mainland China could speak English, a lot of talented people working in the business and better stability of the IT-infrastructure, these were some of the main reasons behind the decision.

GL has a wide role at the office; he is office manager, software tester, administrator and also looking for talented people to hire. The formal title that GL has is Corporate Operating Officer. GL states that this title is only for selling reasons, to be acknowledged by the customers that are buying the service, for them to see that he is an important person at the company. GL sees himself as an IT-Consultant, as does the rest of his colleagues. GL states that the only person who has a title is actually GL himself, because of his international status. Further he states that his office is expanding, until 6 months ago he was alone at the office, but he has now hired another expat and looking for more employees, probably Chinese consultants. It is important that the employees he is looking for have good English skills both
oral and writing. GL states that every employee in the company needs to establish contact with the customer and therefore English is a must.

The company’s customer base is mainly from Sweden and Denmark. The company was established in Lund and Shanghai. Lund is quite nearby Denmark and GL is also born in Denmark, which made Denmark a more reliable nation to establish business with for the company. GL states that even though Sweden and Denmark are their primary focus for selling, they also have a Japanese company as a customer. The connection with this Japanese company happened by coincidence, but has been a successful forth going cooperation. GL describes that the company is quite small, only 10 people in Lund and 2 in Shanghai, which makes it important for them to be making appearances at different events. He states that in Sweden they are conducting lectures, conferences and workshops to enlighten their business ideas to potential customers. He describes that there are a lot of different people and companies getting together at these events which gives a lot of publicity for their company. Above these events he claims that the only place where they do cold-calls to establish customer connection is with Swedish companies.

When asked about the business the company is conducting GL states that it involves every type of testing. GL is involved in manual testing, automated testing, test design and test management. In the Shanghai office they establish the execution of these tests. This is because of the distance of to the customer and makes the Lund office aim more towards consulting services. Which means that the Lund office also conducts strategies, establish organizations and more structural problems for the customer. Clients that GL is conducting outsourcing services for varies a lot. He states that it can be any company that creates software. It can be different kinds of software, like embedded software, smartphone apps, web portals or pc software. This software comes from many different industries, like the defense industry, insurance, healthcare or e-business to mention a few, GL states. The Shanghai office works exclusively with test that doesn’t need any particular hardware. It would be hard if not impossible to ship hardware back and forth all the time. GL describes how they are working with web based software or smartphone applications most of the time. Further he states that it would be impossible if they would need to ship hardware because of Chinese laws. To import electronics to China GL states that there are restrictions and certifications from the government that is required. Everything that is imported needs to be certified by the government, but software can’t be controlled like this and isn’t an import like material things, says GL. Therefore the business in Shanghai is limited to non-hardware required software, while the Lund office does conduct business with specific hardware requirements.

GL describes the way they are working and states that they are context driven, which means that they don’t have any predefined ways of working. GL states that working in a context driven environment makes them more competitive against rivals, since a competitor’s model of working don’t always suit all customers. Therefore the company doesn’t believe in a standardized way of working. GL describes how there is a needs to be adaptable in several ways of working in order to deliver the best results for the customers.
Many companies don’t see test as a discipline that needs constant work, people tend to reconnect to test in the end of the project (SDLC). GL states that test is a career and something that needs to be taken care of in time to establish sufficient results. In order to become a good tester it is necessary to understand why one needs to test instead of understanding the software behind it GL says. It is easier to understand the software than to become a good tester he further states.

GL states that for the way his company works, it becomes more efficient for them to understand the problem, what are they going to solve, what is the mission and what requirements are there?

Sometimes it is even unclear for the customer what requirements are needed from testing. The work methods differ depending on which phase the testing is being done. GL describes how the work is focused on preventing bugs early in the life cycle. The general way GL is working describes what methods, techniques and tools needs to be used, which varies from project to project.

The contracts can be very short in test outsourcing GL states. The shortest has been only a couple of weeks. But the average is about 3 months he says. In order to establish good outsourcing communication with the customer, GL states that the communication with the customer needs to be frequent, at least several times a week, preferably daily contact, with both formal and informal communications. The relationship is built as the project goes on and GL describes how virtual Communication is enough to maintain a successful cooperation between the parties.

The biggest reason why the customer chooses GL’s Company he states is because they have got extensive knowledge in the area and a good reputation on the market. They are active within the test community, doing lectures and writing blogs. This makes them visible for more customers and gives them a good Curriculum Vita. GL further says that almost every customer doing business with the Shanghai office has extended their business collaboration contracts.

GL describes how earlier customers have been satisfied with their work, giving them acknowledgements and good references. To maintain the position of a well working company GL says that they are working under the influence of the key word Value. Does the work give value to the customer?, why are they doing the work? These are questions that they ask themselves so that they can try to challenge themselves in becoming better and more efficient. GL says that this mindset has helped them to get where they are today. He further says that the customer notices that they are trying to challenge themselves, becoming better and the customers appreciates their work.

When the test is finished another problem can often present itself other than what is described by the customer. It happens frequently that in order to fix the small problem for the customer there is need to look over something greater. GL says that even if a company is sure about what to fix, they usually aren't.

GL states that there is a need for adaption from the clients to get used to virtual communication as they are used to face-to-face communication. Hence the clients get satisfied with the work they do. GL continues and says that most of the clients have an understanding of when they chose to establish outsourcing that there are limitations and one of those are the
communication methods available. Hence the work together with the client is to choose the most efficient and flexible method preferred, whether the communication goes through audio, video, e-mail or chat depends on the client.

If the customer wanted frequent face-to-face communication they would have chosen a company that isn’t in China doing business, they would have chosen a location in Sweden. To have an office in Shanghai has made the price lower than prices of competitors in Sweden. Hence this is not a reason why the customer chooses GL’s company he describes. GL points out that even though the price differs a little, it’s not the reason to why the customer chooses them. GL’s Company involves talented people with a lot of knowledge in the field and good references from old clients, which makes up for the main reasons why customers choose them.

GL refers back to the quote that almost all of their jobs in Shanghai have been extended and states that the customers feel that their job brings a good Return on investment (ROI) for them. With ROI, GL states that he means that the customer often choose them because they themselves lack in knowledge about testing and after GL and his colleagues expertise-work they feel the quality to be enhanced on their products, there has been a greater value in the testing. GL points that it isn’t just about listening to the customers’ words about the problem. There is also a need to feel and know the challenge at hand in order to get a solution for the customer.

As GL’s office is in China and the rest of the company and clients is based in Sweden there is a time difference of 6-7 hours depending on summer/winter time. GL points out that the time difference affects the company and clients in both positive and negative aspects. The positive about the time difference he claims to be that the company as a whole gets more office-hours. Negative experience being that if a problem in the morning occurs Chinese time a whole day can be lost, due to there being nobody in Sweden to reset the servers, since it is in the middle of the night in Sweden. However this occurrence rarely happens.

GL says he has noticed flaws regarding IT-Infrastructure with China, in comparison to Sweden. At his office the internet speed is alright which is a must for his business, but in his apartment the speed isn’t what it claims to be and can sometimes become a challenge for him. Even though GL has the fastest speed that can be provided by China Telecom (30 MBIT) it isn’t close to this speed. The speed issue has to do with something called the Great Firewall of China GL states. He further describes that internet traffic goes through 3 exits with traffic out from China, because certain web pages are blocked in the country and this causes flaws with the speed. Because of this, web pages outside China like Google can become very slow to get access to he says. Traffic localized within China on the other hand has no issues with speed. Due to the reason of blocked traffic GL states that they are working a lot via virtual protocol network (VPN), this in order to be sure that none of their traffic is getting blocked. He further states that he would have wanted to work without VPN but this is not an option today. Either it work with flaws through VPN or it isn’t manageable at all.

GL says that in order to establish a face-to-face communication feeling with the customer he prefers to use video conference as a virtual communication tool. However video conferences aren’t always preferred by the customers or managed to use properly because of the flaws in the internet infrastructure. This makes audio conferences and e-mails the most used methods. GL adds that often the communication methods is started with e-mails and telephone as virtual communication and then could develop to become more managed via video
communication. GL states that he personally doesn’t feel any flaws with only establishing e-mail and telephone contact with the customers, he has done it since 2008 so it’s very common for him at this stage.

As video conference is the preferred virtual communication for GL, he states that it’s a common method to use together with his colleagues in Sweden as well. As he manages this with his internet connection at the office without flaws, it doesn’t work as smooth at his apartment. GL says that this is a challenge for both him and his colleagues due to the time difference and it is common that the video conference needs to be done outside office hours to work smoothly. He further says that they try the best they can to cooperate with video conference when it`s office hours for GL, hence there being a need for video conferences to be flexible and sometimes happens outside the office. GL states that this challenge makes a latent problem, they have solved it but it can occur.

GL describes that the business is going well; most work with the Shanghai office has been extended. GL was 6 months ago alone at the office but has now hired another expatriate co-worker. Possibilities for more new recruits in the future seems realistic, these employees will probably be Chinese citizens due to the lower salary, but GL says that it isn’t just to employ new people; he has some expectations of them. An important aspect for GL is that the employees can reach out to the customer. He states that it is incredible hard to find employees that speak English well to establish good connection and communicate with the customers. The company wants to work in ways where it is important that every employee can communicate with their own customer and not only let the project managers get in touch with them. GL describes how they are not just looking for good testers and goes on to describe direct communication with the customer to be something that develops a tester to gain knowledge and become even better.

Further GL states that there are differences in cultural manners. The way GL and his company works are not common in China. GL states that in China it is common to work very structural and you get told what to do. While working methods for GL can vary and be very unstructured and flexible in order to manage the best results for the customer. Further on he states that Chinese people aren’t used to case studies or group work to establish teamwork, they are instead focused with data to conquer the challenges by themselves. When asked why the company is located in Shanghai, GL says that it’s because that is where he wants to be stationed, but it’s also the place in China where there are the most talented people regarding IT-Outsourcing and English is located. The only place where they could find more competent people for their business is probably Beijing GL claims, but the English skills lack even more there. GL states that due to economic reasons they are not going to employ people directly from the universities, but the probability of finding competent personnel for their business is higher in Shanghai, due to it being more internationalized than other major cities in China.

He concludes that China is a country with contrasts and Shanghai is one of the more expensive cities since there are more foreigners there and the wage-gaps differ enormously between IT-workers and by that often higher in comparison to the rest of China.

At the end of the interview GL states that even through all the flaws and challenges, they are trying their best to establish an efficient and successful business value to the customers. They have to manage with the possibilities available.
4.1.2 Shanghai Office co-worker

The second interviewee is AS who is an employee at the company's Shanghai office. He has been working for the company for about 6 months, but been working in China for several years.

AS says that he has been working in China for over 4 years and that he moved to Shanghai for the job opportunities in the city. He states that he has been working for the company for about 6 months and when asked about his role at the company he states that he is an employee and works mostly with manual testing to customers in Scandinavia, i.e. outsourcing.

AS describes his typical workday, which includes 3 sessions of 1.5 hours a day where he tests certain functionalities and searches for errors in software’s. He describes it as exploratory testing which he states means that there are no huge plans with the testing sessions, he tries to revolve the session in the same way the users would have done. When an error is found he pursues it and tries to find the cause. After one session AS describes that he has a debriefing, both internal in the office and external with the client where he gives important information regarding the test-session and what has been found. In order to improve the skills he states that he always keeps value in mind for the client as something extremely important and in what ways he can improve his work. The debriefings last about 5-10 minutes he says.

AS states that their work is going through phases in order to get the job done, but he also claims that it is important to be able to go back through these phases when he for example decides that parts of the test-sessions needs further testing. He describes this way of working as an iterative way. A way where they have phases to easier understand the work-process, so the quality can maintain the highest value for the customer.

When first asked how the customer interaction starts with the client AS talks about how they usually have a larger conference call, for example on Skype where an video conference takes place, the client then goes on to explain what they want and how they want it. They might give an introduction to the actual software, then the communication would continue based on the methods the client prefers. AS mentions that a typical start to the interaction would be him asking a lot of questions to make everything clear, there is usually a lot of questions that needs to get answered AS says. Documentation is helpful, however there might not be enough of it or the documentation might not be clear enough, hence the need for questions AS states. Once that is established the actual testing can take place and that needs debriefing as well as back and forward contact, usually in an agile manner where fast responses are needed, these messages need to be short and concise with the client being in focus, only what is important for the client needs to be presented in these texts. AS says that if nothing is found then that is stated in these texts to make it clear for the client about how the project is moving forward. However during some longer instances, larger debriefs might be needed.

AS thinks that the reason to why the customers chooses their company over their competitors to be because of their good reputation and networking. The clients are satisfied with their work and this fact usually spreads rather fast, getting other companies interested in working together with them.

When asked if AS thinks that face to face communication is needed or if virtual communication with the customers was enough. He said that it is very helpful to have face to face interactions, especially in the start of the projects where a lot of information needs to get presented. However as ASs company works in an agile manner they are more in need of fast
communication, a need to contact the client fast is apparent and sometimes it might even be more convenient for the client not to have face to face contact and instead have virtual communication act as the main way of working. The client might not have a conference room available.

Also spoken words might not be that easy to interpret, sometimes writing the problem down might be more explanatory in the sense that all the facts are written down and that makes it easier to go through the problems more thoroughly AS states. The advantages that face to face contact brings are mainly made apparent by larger discussions AS believes.

The customers have shown to be satisfied with the company’s results AS says. However if the companies want something done differently or have comments they will definitely tell AS. He thinks this is very good as it helps him improve in his work. Constant feedback between both parties is needed AS says.

AS says that he usually don’t have problems on an international front with clients as they always speak good English and work in a similar manner, except for when the customers are not forthcoming with information or are somewhat reluctant to release all the information that he might need. Communication that can be a problem AS says and therefore it becomes very necessary to constantly try to ask the right questions AS believes.

When asked what virtual communication problems the company experiences in terms of the customer aspects. AS states that getting the information in time might sometimes become problematic as the recipient of the question might not be present at the desired time or not have the information that he needs. Of course this could have been solved if AS was located in the same office as the client he says, but that is not possible.

The internal virtual communication techniques that are used are emails, Skype and a community website called Podio AS says. AS also talks about Podio being similar to Facebook where messages can be left and also documentation of work can get presented in a proper way. However the really important things are usually always sent via e-mails AS says. The external communication methods with the clients are usually the same sort of virtual tools, with a focus on Skype and emails as the main work methods.

When asked what virtual communication methods AS prefers, he states that he likes skype the best. This because of the agile possibilities it presents. You can easily get in contact with the client in a real time chat if necessary, leave offline messages or do video conference calls. However AS does point out that emails do have advantages of its own as larger messages are easier to present via this platform of communication. AS does feel quite satisfied with the methods currently used by the company to communicate, however he does think there are problems as he mentioned with the messages not being answered in time always or the reluctance in releasing the information needed.

AS states that there definitely exists problems with China's current IT-Infrastructure and how it affects their company. He states that the censorship is rather large and they need to use a VPN at their office. Sometimes things get blocked and you have to work your way around it AS says. AS says that they use Google and Gmail (Google Mail) at the office, but these sites are often targeted by the censorship as well, making them work slower. AS states that even with VPN services there are problems, since these services usually don’t function in a stable environment.

- 36 -
state. AS talks about how annoying it can get, working with testing a social media related project can be a huge pain he states.

However the internet speed at the office seems to be rather functional AS says. They share the connection with two other offices, but it is still functional. When asked if AS believes the censorship is slowly fading away and the internet is getting more open, he says that he has found the censorship only increasing in the period that he has been in China. He talks about how at first he didn’t really even need a VPN, but with the increase of censorship over the years, the VPN services have become essential. AS even mentions how some of the smaller VPN services have been taken down to the point where you can’t even access them from China anymore. He feels that the censorship is only getting to be a bigger and bigger problem.

AS feels that the improvement in the language skills of the Chinese youth is getting better, but only slowly. AS talks about how it’s not only a matter of language barriers being in the way of the communication to become a successful point that needs to get addressed. AS has however noticed a slight improvement in the English skills of the Chinese youth over the years.

It can prove to be difficult to hire Chinese individuals straight from the universities AS states. He talks about how the working culture is very different and might be hard to adapt to. Especially in a field where you have to be very critical, open and creative. He says that it would be possible, but would require quite a lot of work in terms of training and so on. It is possible, but would most likely be quite challenging AS says.

4.2 Chinese Consultant and IT-Outsourcing Company

The third interviewee is LL from a big Chinese IT-Outsourcing company. The company employs over 4300 people worldwide and has their main office in Shanghai, China. It has been in business since 2002 and has been constantly growing since the start. It is a successful joint-venture establishment by the Chinese government and Microsoft. They are offering different kinds of IT-Outsourcing, from Software development, to complete Business Process Outsourcing.

The interview started with LL telling us how he has been in the IT-Business since 1995 and conducting IT-Outsourcing related business since 1998. He has been working with European and mostly Scandinavian clients since 2007. LL describes how he was asked to establish the European office in 2009, for the IT-Outsourcing company. He decided to do this and the company established an office in Gothenburg, Sweden, where the Nordic regions main office is located today. Since 2009 he has been the Vice President for the European region which means that he has the responsibility for the establishment of this market segment for the company.

LL describes how the company was established 2002 because Microsoft had problems establishing itself in the Chinese market. Therefore Microsoft created the company together with the Chinese Government as a joint-venture company where both parts own 50% the company. As the company was created with Microsoft, this meant that the personnel had extensive knowledge in Microsoft’s products. Of the 4300 people working for the company, about 2000 of them are employed by Microsoft only. LL further describes how Microsoft has
a lot of suppliers, over 4000 globally, but only 11 premium vendors. He states that 5 of these
premium vendors are located in China and his company is the biggest in the Country, as big
as number 2 and 3 together. This has been made possible because of the joint-venture between
them and Microsoft.

LL describes how the company manages a complete IT-Outsourcing solution for the
customer. He describes something called “One-Stop-Solution” which is a solution for a
company that wants to expand with the Chinese market. The expanding company sends a key
person from the company to China where he together with people from LLs company discuss
the possibilities and together come up with a solution that is efficient for the client. The help
involves everything from the start of the project initiation to the end of the life cycle. An
important part is the Government connection LLs Company can provide. To become an
efficient company in China it is very important to establish a good connection with the
Chinese Government LL states. LL further gives example of one big IT-Outsourcing option
they can provide, which is called Business Process Outsourcing (BPO). With this type of
outsourcing the company can provide help desk, service-centers, call-centers, with over 100
employees that help customers with software issues or activation of applications.

The business type of the company is described as a combination of on-set and offshore, which
LL means makes it more efficient and reliable for the customer. As the company has offices
all over the world it is easier for the company to establish contacts with employees in case of
help they might need or questions that they may have. LL says that the main office and where
the work is done is in Shanghai. LL describes how about 20% of a project is done on-set
together with the client in order to get a clear picture of what the customers wants. LL gives
an example with companies in Sweden, which he has done several times. He states that in
Sweden they often hire a local IT-Consultant whom they communicate through, this way the
customer gets a more personal feeling of interaction and doesn’t feel like outsourcing to
China is a business that is located far away, which they might make them lose control.

LL states that it is important with personal contact to the customers and with his extensive
experience in the field he has noticed it’s not effective to only establish offshoring for the
collaboration without any sense of personal contact.
LL further goes on to talk about how personal contact is important in order to maintain a good
working process. At first the company shows a demo of their services to make the customer
interested. When they established their connection with the customer they usually show the
client a prototype of how their demands are interpreted by them. If something needs to change
we change it to fulfill the specifications, LL says. When a prototype is done we together with
the client set the specifications. Further LL says that many times the customer has a
specification which makes the job easier for them to start up, with every demand set.

Further on LL describes how a project leader is being sent to China when the demands have
been set and the work can get started. The project leader will be in China for about 1 week to
conduct workshops together with the development team and project leaders from LLs
Company. Together with the project leader LL describes that they conduct brainstorming to
develop their specification to the better. If the customer likes these improvements, LLs
Company implements it in the specification for the customer.

LLs state that in order to maintain good feedback to the customers, they have a lot of tools
that enables the customers’ supervision of how the projects are going. Through internet it is
possible with real time data progressions to see what has been done, what is going to be done
and what problem that have occurred. The customers also have access to all necessary documentations about the project, LL says.

To keep the time limit on the right track LL describes how they are having small communication meetings everyday with the customer and a bigger one once a week, approximately 1 hour LL states together with the customer, to give feedback about how the progress is going and the perceived results for the upcoming week. LL also says that if something has been problematic during the week and the planned work hasn’t been fulfilled, they try to find the cause and solve it. LL further says that it is important to give the customer as much feedback and involve as the customer wants.

Not all customer companies want to send a project leader to China, LL says. Therefore LLs Company also offers the possibility to send a project leader to the customer to conduct the services, this in order to establish a good business solution and cooperation. LL states that the plans being conducted together with the customers are of great importance, but it is as stated before just as important to maintain daily contact.

In order to easier reach the goal LL describes how they set up milestones that should be reached within a certain time line, these milestones are set together with the customer and if they are not reached or the work isn’t being developed to meet the specifications of the customer, then the customer has the possibility to discard the project. Further LL says that this is a policy from his Company, but with his experience it has never happened that the result wasn’t working as the customer specified. He states that they have good knowledge and are maintaining good feedback with the customer to keep the project on the right track.

As earlier jobs with customers has gone very well for the company, with customers being very satisfied with the outcome it has given them good reputation in their field. This has made it so that more customers choose them as they are reliable and well-working from their references. LL states that at first when they established on the Nordic market they had a tough time. Differences between people in different continents are tough to conquer. So was the case for LL and the company. However the references have helped a lot, LL states. As they managed to establish one big contract, he immediately noticed that the words about their company spread and more customers needed their expertise. LL describes that it helped them a lot when they first established in the Nordic market as they are a Premium Vendor for Microsoft.

When LL got the question about how long contracts usually are he said that it differs a lot between projects. From the European market which, LL manages he says they don’t do small projects. The shortest project time is about 2-3 months he states. Bigger contracts on the other hand are common to be around 3-4 years long. LL states that contracts are often extended by the customers. Customers are very satisfied with the results they accomplish and in cases where there have not been extended contracts it has been a question of economic resources from the customers. When asked about reasons for not accepting small projects LL states that it is not of economic favor for the customer. LL says that IT-Outsourcing is about 20% of communication establishment between companies so the cost and time of these establishments are not in favor of small projects, while bigger projects can be of big return on investment he states.

LL says that he has experienced a great change with IT-Outsourcing over the years he has been in the business. In 1998-1999 he had to act as an interpreter in order to get the company
and client to reach out to each other. Since only 2007 when LL became Vice President for the
European Market of his company he has noticed a dramatic increase of English understanding
skills from the Chinese people, especially in Shanghai he states. The younger generation
Chinese people are more interested of foreign cultures and seek knowledge outside China.
The increasing language skills have led to work becoming more efficient and better quality
can get achieved. LL describes how language is an important assessment when working with
IT-Outsourcing and when English is the business language, it is very important that the
communication works perfectly he says. Therefore his company only hires people that can
communicate in English and be open-minded to understand the language/culture better.

As the language barriers becomes less so does other cultural issues states LL. He describes
how China has become a more westernized country due to the facts that more business
establishments are being conducted all the time in China. Over the years that LL has been in
the business he speaks about a world that is becoming more globalized with the help of ICT
and outsourcing working together as a tool. He further states that ICT has been enhanced so
much over the years that it has made important factors to why IT-Outsourcing has become
such a success. Differences and challenges can easier be managed he states.

LL then describes how old customers have noticed the lesser differences and became very
satisfied with the cooperation between them. On the other hand he then says that new
customers can be reserved over the distance and difference in culture. In that case they
establish business connection and communication through a local IT-Consultant to make
things feel more of like a face-to-face communication and the customer can then feel that they
have more control over the situation.

As ICT has been developed significantly over the years that LL has been working with IT-
Outsourcing he says that it’s very helpful to maintain a good quality of information
communications technologies methods that vary from audio-, video conferences and a lot of
e-mails etc. As they are having daily meetings with the customer, ICT makes it possible in an
efficient way. In order to give the customer real time updates LL tells how they use computer
mediated software named Project place. This software is a web-based application that can be
used both internal for the company and also to interact with the customer on a lot of fronts.
The company shares data on how the project is going and share documents, feedback, files
and also the ability to book meetings. LL describes how this platform enables tracking on
everything regarding the project.

Further on LL states that he prefers communication where you have the feeling of face-to-face
communication and web-based meetings is ideal for this type of communication, it enhances
the collaboration he states.

Even though ICT enables more flexible and better quality for IT-Outsourcing LL further
describes that there can be flaws in the system. The fact that project leaders get so much
responsibility can make it risky for the project as it becomes highly reliant on the project
leaders performance. LL describes how different project leaders have different ways of
working and acting. Even though they can communicate well through English they have
different aspects of the matter things should get conducted and interpreted. The project leader
is the key-person and LL states it is important to hire the right man for the task.

Further on LL describes how China has significantly improved the IT-Infrastructure over the
time he has been in the business. LL states that today China has a competitive IT-
Infrastructure, but there are still flaws. LL says that websites in Sweden need some time to get accessed, while data traveling within China is accessed a lot faster. To send data out from China is therefore a challenge. LL describes how the access points from China to Europe aren’t wide enough for all of the traffic and therefore becomes a challenge to manage. In order to be secure, the company works with VPN and this slows down the traffic a bit LL says. However it is a necessity to work with VPN, in order to be secure.

LL ends the interview by saying that if the improvements 5 years from now will be close to the improvements from 2007 until today, IT will work almost flawlessly. He says in 2007 it wasn’t even manageable to work with VPN, now it works, but with just a speed reduction.

4.3 Chinese IT-Outsourcing Company

The fourth interview conducted was with EX who is a marketing specialist in a Chinese company with a big focus on IT-Outsourcing. The company was established in 2001 and is currently working with top 500 companies in different countries around the world.

The interview started with EX describing her role. She is part of the marketing team, she mentions that she is one of four employees in the team. She describes how they have a larger marketing team located in Denver with the managers currently being located in Denver as well. In her role she takes care of public relations, general marketing, events, press releases and so forth. She mentions that when it comes to public relations she takes care of the company’s image, she handles communication through social media forums with a focus on Facebook and Twitter at this point of time. Her role also includes her working together with the sales team to generate more leads.

EX says that she has been working in the field for about 3 years, she joined the company in 2010. She mentions that the company expands all the time and just recently this year they have started a new branch in the e-commerce market. She says that they are trying to bring western brands in to the Chinese market. EX describes how the Chinese market is becoming the second largest economy after the United States of America. Therefore people are eager to get in to the Chinese market she says. EX mentions that the Chinese people have no ways of buying the western brands at this point of time, they are forced to hire agent that are based in the western countries to buy what they require for them. This increases the time to ship goods to China dramatically. EX explains how their company is trying to help these brands that can not be bought in China by entry strategy, logistics, marketing, a kind of one-stop-solution. She says that these companies don’t need to worry about entering the Chinese market as their company handles everything that is needed.

EX puts a lot of enficamente on describing how important the security is for the company, therefore the employees go through various amounts of security checks, which include different stages of clearance to enter rooms and access data. EX says that the high amount of security is a big selling point for their company as security usually is important for their customers.

Every week EX has a debriefing with her manager, this takes about 10 minutes and usually is performed via video conference with the office located in Denver. This debriefing consists of what EX has done and what her work plans for the upcoming week is. Communication with her manager is constantly being kept during different instances EX says. At the end of the day
EX says that she states what she has done. At the end of the week they have a team meeting that is done through video conference where they share knowledge and updates about how the project is progressing.

EX states that the projects usually are done through phases, its being mentioned how agile processes are being implemented. SCRUM has been known to be one of these agile processes EX says. However the methods used are based upon the client’s requests EX says. As their company has a big focus upon what the client wants, they try to constantly optimize everything to fit the customer’s needs. Even senior and junior team members are picked for the different projects based upon the customer request. Once the requirements are stated, they start training the personnel, sometimes this requires sending some personnel over to the customers site.

EX says that to be able to check customer satisfaction the company performs surveys to gather information about the subject. Milestones are set in place to make sure that the customer satisfaction is being kept high, these milestones are deadlines that have tasks listed, once these tasks have been achieved in the time span that was assigned for it, they can move on to the next milestone EX states.

Software is being put in place to monitor project progress in real time EX explains and tests to debug the software is constantly being put in place to make sure the software is as bug free as possible for the customers. EX says that the company keeps working with the customers for as long as needed. They develop the system, upgrade and maintain EX says.

EX says that their customers choose their company over their competitors because of the high quality that they offer. All of their clients are top 500 companies in the world EX says, therefore their customers usually have quality in mind over price. EX says that they were the first company in China to achieve both ISO200071 and CMI level 5. They stand for security and maturity in their development capabilities EX says. All of their teams have these certifications and that is a strong showcase for the customers EX says. EX also states that security is extremely important for their company, they have specialist teams put in place to make sure that their client’s data is secure.

The company has a English only policy EX explains. The CEO of the company realized how important communication is in this industry and therefore has invested a lot of money in English training for the company’s employees. EX also says that they encourage English training not only via classes but they also ask the employees to communicate with each other through English instead of Chinese as much as possible. The customers can feel that there won’t be any communication problems when they visit the office, the English only policy is not just advertisement it is a real thing, EX says. Recruiters only accept résumé’s from people that want to learn English or can already speak a bit at least and only the top 5% get selected to the company. These reasons being big factors to why customers want to work with their company EX says.

When asked how long the contract times with the customers are, EX explains that they usually vary from a minimum of 2 years up to 6 years with the average of the contracts being 4-6 years long. EX states that usually the cooperation starts with a pilot project together with the customer, which eventually turns out to a bigger contract with time.
EX says that face to face interactions usually happen during the first part of the interactions. Later on daily meetings usually take place with virtual communication as the platform, often with video conferences. EX says that face to face communication is hard to keep active as the distance can be quite great, however it is rather normal for the customer company to send senior personnel to visit at least twice a year.

When asked what internal communication methods that the company uses, EX explained that they have one unified platform in place to conduct the internal communication. This system allows for covering the communication without help from third party software, such as Skype for example EX says. This system is often also used towards the customers, however to be as convenient for their customers as possible, they will agree to use third-party software’s such as Skype, but in case this is to happen, the employees need to apply for security clearance from the managers first, to make sure that nothing gets compromised.

EX states that the customers have reported on the different surveys and given them scores between 4 - 4.5 in satisfactory. EX says that the reason the scores might be a little lower at times has been because of the English skills lacking sometimes during the customer interactions with the clients. Hence the reason to why English is so important for their company EX says.

The cultural differences are handled by the contact person being sent to handle the project interaction being quite familiar with other cultures, especially in the culture that the contact person is sent to EX states. The employees all accept different cultures and the previously mentioned English courses also have cultural knowledge included in them EX says.

When asked what flaws EX has experienced when it comes to communication. She mentions that clients almost only communicate with senior team members at this point of time, even though they might want to speak to the entire team and that is something that the company is trying to improve EX states. They provide training for junior staff members to get better influence, better promotion opportunities, to develop and go abroad for training. They hope this will create more team building, connect people, offer balance and lower risks to create stable teams.

EX talks about how problems do exist when it comes to reaching blog communities and social media in China. Therefore they use VPN services EX states. EX says that the IT is developing in China and talks about how she feels that China will most likely surpass India in IT-Outsourcing as the government has invested heavily in Chinas IT-Infrastructure, IT-companies in China get 10 years where they have tax reduction, and this is of course a big benefit for the IT-companies in China EX states.
5. Analysis

*In this chapter we focus on comparing the results of our findings. The aim of the analysis is to serve as a baseline for our conclusions later in the study. We try to find patterns from the different case studies to bring validity to our study towards the theoretical elements presented in our research and also analyze the validity and reliability of our empirical findings. All of the aspects are to be processed towards our research questions as the most fundamental reasoning behind the analysis. This is important as the analysis shall later in the study be used to answer the research questions to make sure that the quality of the study is kept high.*

5.1 Research Analysis

5.1.1 Research analysis design and methods

In order to create the analysis results there was needed to follow the plan brought up in chapter 2, the Research Design. To be able to get the most out from the empirical findings and the theoretical aspects brought up we needed to compare these findings with each other. Therefore we made a Comparative Analysis section where the data from the different empirical cases are being compared with each other and the challenges at hand are brought up. Further on in the analysis chapter there was needed to conduct these empirical findings towards the theoretical findings to measure the differences and similarities. This was made through a theoretical analysis.

In order to get the highest validity as possible in the study we made sure that the case respondents had high influence in the business and has great knowledge about their specific field. It is important to enlighten that all case respondent involved does meet these specific requirements to bring the reliability and validity high for this study. Further on all of the case respondents felt that the subject brought up was of great interest for their business and a important topic to address. For us as researchers this measures the credibility higher and brings further enhancement of the validity to this thesis.

In order to measure high generalizability in the study it was necessary to be able to make follow up questions to strive for the answers needed to conduct the analysis. Above this it was important that we had a concrete theoretical backbone so we had great insight in the field and could measure the empirical findings. Further on to measure the generalizability the study conducted was made in China and therefore it is of major importance to China and can be served with less generalizability in studies done in other countries.

In order for us to achieve a high transparency it was important to be able to compare the empirical findings with the theoretical to make it clear that the findings were based upon the theoretical aspects. The tables done in this chapter (*see tables 5.1 to 5.9*) therefore serve to establish the transparency high between the empirical and theoretical aspects.
5.1.2 Research Analysis in action

Figure 5.1: Research Analysis in action.

5.2 Comparative Analysis

In this subchapter the focus lies on developing a section where the different interview statements are being analyzed towards a comparison of each other. This is important as it shall establish a baseline for the differences and similarities that the companies have in relation to our ICT subject research questions. As it is important for this segment to analyze a more in-depth background of the companies and interviewees the analysis shall take the entirety of the findings in mind, this in order to gather accurate data and establish basic guidelines to why the findings are relevant. This subchapter is also the baseline for answering “RQ 1.1: What is the current IT-Outsourcing status in China?” because of how it analyses the entirety of the findings.

The first point to address is the different roles every interviewee has within their respective company. The reason this is important is to showcase that all the interviewed personnel have in some way been picked to represent their company by the management circuit. Two out of the interviews are conducted with management staff members and the two other interviewees have been chosen by the management directly.

GL as stated in the interview summary itself is the CO-founder of the company, AS works together with GL as one of his office co-workers and has a lot of responsibilities as the office is not that big in Shanghai. Their company has a large variety of customers around the world. The company itself is largely focused on testing software, especially in their Shanghai division. As stated in their respective interviews both of the individuals use ICT extensively in their work, to the point where you could conclude that the company would not be functional without the ICT to keep being effective in what they do.
Similarities can be found when looking at the other two companies when it comes to the use of ICT and how they conduct their work. When looking at LL and his company is becomes quite apparent that he speaks for a wide range of IT-Outsourcing world as the company is extremely big and he has a lot of experience in the field. LL has been in the IT industry since 1995, he is a Vice President of the European section of a company with over 4300 employees worldwide. When talking to him, he states that the work they do would not be possible without the ICT they use, as stated in the interview. The work that the company conducts is largely based on providing one stop shop solutions for their customers, which means that they will help companies that want to outsource IT to China with everything, taking on all of the responsibilities that come with making such a big task possible.

When looking at the interview conducted with EX and the company she works for, it becomes quite clear that she has good knowledge about how the company operates both internally and externally. She states that she was picked by the management of the company to be their representative and she speaks for a wide range of experts in the field, such as herself. The company that EX works with are all top 500 companies in the field and they conduct a lot of business worldwide. She also mentions the important contact they have with ICT, from the extensive use of ICT it is quite apparent that even here their business would not work without the use of it. The work that the company does is based on providing their customers with mainly large IT-Projects that they want to outsource to China. They are focused on providing high quality IT-Outsourcing depending on the customers’ needs. They do also conduct one stop solutions, which means that they will help companies with everything that is needed to be able to outsource IT to their company in China. Making it possible for clients that might not be as experienced or sure about how to outsource IT to China have the opportunity to rely on their company on everything they need to make it a reality.

If one is to compare these four case studies in regard to their stand within the company and how much of an representative voice they have, it is apparent that all of them speak for major companies that work worldwide and all of the participants have either been a part of the management circuit or in some way have been picked by the management to participate in the interviews. All participants of the interviews have been in the IT-Outsourcing field for several years, they themselves use ICT in their daily routines at work to make what they do possible as they state in the interviews, they also clearly state that their respective companies use ICT just as much, if not more, therefore all of the conducted interviews have displayed results of extensive ICT use. It is safe to say that even though the companies have a lot of differences in how they use ICT, they all are equally reliant on it. The different interviewed companies were asked questions based on not only the extent of ICT use, but also based on what sort of ICT they use, how they use it and when. The summary of the answers show differences in methods mainly. The companies might in some cases use the same software, Skype is a popular example, but they also use it differently or in different amounts based on several factors such as there being a replacement software that the company feels work better to cover the bases that Skype does, or if the company sees Skype as a form of security or economic threat that could be mitigated.
All of the companies that have been included in the case studies have been IT-Outsourcing related with, one company being focused more towards Sweden, Denmark, but also known to have worked with Japan, and the rest have been companies that work on a worldwide scale together with huge IT-Companies such as Microsoft. All of these companies are also in some way focused on IT as their field of business. One of the cases have a more centralized way of working as they have focused on only testing, which in itself is a rather large field. While the other companies offer multiple packages where they can handle anything that a customer could need, these companies also focus a lot on offering one stop solutions that focus on making sure their customers have everything they need in terms of IT-Outsourcing.

One major difference between the companies is the fact that one of the companies sees themselves as context driven. This means that they work towards adaption for the customers, while the other companies have more standardized ways of working with relation to their customers, with some levels of less major adaptations. This can be very dependent on the company size as the context driven company is a smaller outsourcing company and thereby comes the fact that they can manage their personnel easier. Coordination can therefore come easier if the projects don’t need huge amounts of people getting involved, this can also apply to the fact that this particular company focuses on testing while the other companies focus on everything that the customer needs, which would include testing as well. However from the interviews it is safe to say that even the bigger companies can offer less standardized ways of working with their customers, if that is what the customer wants. It is simply just not as common.

Another big factor is how the companies feel different about face to face contact or a work relationship that is based on having personnel on the customer site for better integration. One of the companies do suggest that having a person at the customer site might be helpful, but would not really be a possibility for their company, so they have adapted their organization to work without having done this. This company has their Shanghai section work exclusively towards customers without almost any face to face interaction from their part. The only form of real face to face interaction that they come across is at different conferences where they might meet potential customers, everything else is dealt with by using virtual communication. The other two companies usually always have at least a project leader at either the customer site or at their own site from the customer company. Both of these cases can have benefits and problems. When it comes to the company which does not have any face to face contact the benefits are that they can then spread the communication through their entire company, where it is not only one project leader taking all the responsibilities. This allows for all of the staff members being able to contact whomever they need to contact through virtual communication. However, the disadvantages it brings can be the company needing to reach the customer for important questions or feedback, but at this time the customer might not be present at the virtual communication media at the time. Making it so that offline messages have to be left and the important message has to be delayed until it finally reaches the person it concerns. This can in more drastic situations make the companies involved lose work time on the project or render a situation where the company has to take decisions without the customer, if the decision in this case would be wrong, it has to get reworked and fixed.
When it comes to the other two companies’ situation, they have personnel on the customer side. A flaw that can become relevant, which was clearly stated by one of the companies was that the project manager can get too much responsibility and the project would rely heavily on picking the right person for the job as project manager. The other company involved also stated this, but also mentioned that having one person handle most of the face to face interactions does reduce team building between the two parties involved, hence the companies and their customers would build more teamwork together with more communication with each other from both sides and with everybody involved, this does not have to be face to face contact but also virtual communication.

All of the companies display similar patterns when it comes to meeting and feedback. It is constant contact every day, both when it comes to questions or quick feedback. Then later on when the week is about to end the companies have bigger meetings where they debrief what has been done and what is left to do. It is quite common for the companies to go through procedures where they start the day of by the management debriefing the staff on what they did the day before and what they are going to do that day.

The companies show rather big differences in contract times that they have with their customers. The test focused company usually has shorter contracts; their shortest contract has been a couple of weeks, while their average contract time is about 3 months. This is shorter not only because of the company size compared to the other companies, but also because of the fact that they are a test focused company that deals with one part of the project life cycle instead of all parts like the other companies do. The next company in the study works with contracts that last for at least 2-3 months, they have a lot of longer contracts as well that stretch for 3-4 years. The last company that was interviewed stated that they deal with a minimum of 2 years for their contracts, and at most the contracts can last for about 6 years. They also state that the contract average is about 4-6 years.

All of the companies have stated in their interviews that it is very common for customers to extend their contracts once the contracts run out. They all believe this is because the customers are happy with the results that the IT-Outsourcing has brought them.

When it comes to internal and external communication the companies also here display some similarities, at least in the way they try to approach the internal communication, however when looking at the methods used more specifically differences appear.

The test focused company and another one of the companies display the most similar ways of working on this internal communication subject. But all of the companies are using a platform that is similar to Facebook, but is made to support all the professional features that they need in order to make the projects run appropriately according to plan. These platforms make it possible for the employees to leave messages to whomever they need to contact. They also have the ability for the company to share internal information in an effective manner; they can for example send project plans to each other and edit them. However these platforms can also be used towards the customer, the companies have the option to share the project
plans or parts of it, sending them back and forward to exchange knowledge. Two of the companies use Skype regularly, Emails and other tool, both internally and externally. These companies adapt a lot based on customer request, with the test company almost completely adapting to what ICT tools the customer wants to use to communicate.

One of the companies however has made their own virtual collaboration software that they try to use exclusively with their customers, this to mitigate any security threats that Skype or other third-party software might bring. They also believe in more of a standardized way of working with customers, they believe that this will make it better for both parties to increase affectivity, while the other two companies believe in more context driven ways, with one of them being a fully context driven company.

From the analysis standpoint it is safe to say that there are several similarities and also differences that coincide within each company when looking at the different work structures.

5.2.2 Comparative Analysis Tables

The tables beneath can be seen to easier point out the Research questions at hand. The main question present itself as; "What is the current status with IT-outsourcing to China in relation to ICT and what challenges exist? How can these challenges be managed?".

In order to fully get control of this question it was important to understand the sub questions which follows as; “What is the current IT-outsourcing status in China?” “What causes the challenges?”, “In what way can ICT help manage these challenges?”. With these sub questions at hand it makes it possible to address the situation more clearly and achieve the main Question. In order to make the traceability and understanding of the challenges brought up as high as possible every challenge serve as their own table. This way the purpose can easily be explained about every challenge, cause of the challenge and in what ICT can manage it.

![Figure 5.2: Overview of challenges](image_url)
<table>
<thead>
<tr>
<th>Challenge:</th>
<th>Swedish Consulting and IT-Outsourcing Company located in China:</th>
<th>Chinese Consulting and IT-Outsourcing company:</th>
<th>Chinese IT-Outsourcing Company:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What software to use.</td>
<td>Will adapt based on customer.</td>
<td>Will adapt to a certain degree, towards the customer.</td>
<td>Very reluctant to adapt, uses their own software.</td>
</tr>
<tr>
<td>What causes the Challenge:</td>
<td>Swedish Consulting and IT-Outsourcing Company located in China:</td>
<td>Chinese Consulting and IT-Outsourcing company:</td>
<td>Chinese IT-Outsourcing Company:</td>
</tr>
<tr>
<td>In what way can ICT manage the Challenge:</td>
<td>Swedish Consulting and IT-Outsourcing Company located in China:</td>
<td>Chinese Consulting and IT-Outsourcing company:</td>
<td>Chinese IT-Outsourcing Company:</td>
</tr>
<tr>
<td>1. What software to use.</td>
<td>VPNs, Firewalls, strict internet protocols and monitoring of activities.</td>
<td>VPNs, Firewalls, strict internet protocols and monitoring of activities.</td>
<td>More standardized software towards the customer with high security.</td>
</tr>
</tbody>
</table>

**Table 5.1: What software to use.**

**1. What Software to use:**
The meaning of this being the challenges that arise from the companies having to decide what software to use when wanting to communicate internally or externally. The problems that can arise can be security threats such as leaks of information or uncomfortable working environments for the customer in case the company decides to decline the customer’s request to work through a specific sort of software for example Skype, this might cause the customer to have to work with something other than they are used to, which might be a problem that the customer has to deal with in order to work with the company in question. Solutions to these problems as stated above in the table can be the use of VPNs, Firewalls, Strict Internet Protocols and Monitoring of activities to mitigate the security threats. Ways to avoid creating an uncomfortable working environment would be more standardized software towards the customers with high security protocols in order to create more options for the customers and still have accurate protocols to protect ones company against potential threats.
Challenge: Swedish Consulting and IT-Outsourcing Company located in China:  
Chinese Consulting and IT-Outsourcing company:  
Chinese IT-Outsourcing Company:

2. Unclear customer requests.  
Works based on customer requests, but also introduce them to their own systems.  
Will work based on what the customer wants. They have their own models as well.  
Prefer to mainly work according to their models, but will adapt based on customer requests.

What causes the Challenge: 

<table>
<thead>
<tr>
<th>Swedish Consulting and IT-Outsourcing Company located in China:</th>
<th>Chinese Consulting and IT-Outsourcing company:</th>
<th>Chinese IT-Outsourcing Company:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sometimes the customer might not know what they need.</td>
<td>The customer might be new to the Chinese way of working / not sure about how to work with outsourcing.</td>
<td>The customer might be new to the Chinese way of working / not sure about how to work with outsourcing.</td>
</tr>
</tbody>
</table>

In what way can ICT manage the Challenge:

<table>
<thead>
<tr>
<th>Swedish Consulting and IT-Outsourcing Company located in China:</th>
<th>Chinese Consulting and IT-Outsourcing company:</th>
<th>Chinese IT-Outsourcing Company:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant feedback through ICT related media.</td>
<td>Introductions and constant feedback through ICT related media.</td>
<td>Introductions and constant feedback through ICT related media.</td>
</tr>
</tbody>
</table>

Table 5.2: Unclear customer requests.

2. Unclear customer requests.  
When it comes to the unclear customer requests it seems like this is an consistent challenge that arises for all the cases, some of the cases are affected differently in the matter that one of the cases almost exclusively work with adjusting to the customers, the second case does adapt but not as much as the first case, while the last case prefers almost no adapting, but will if the customers really need them to. Therefore case one will need to be extremely dynamic in making sure they don’t travel down the wrong path as the customers might not always know what they need. Case three and four have similar patterns with each other as their customers might be new to the Chinese way of working or not sure about how to work with outsourcing. These problems can be managed with the help of ICT in different ways. The first case would be able to handle this with constant feedback through ICT related media. The two other cases would be able to handle these challenges by performing introductions and giving constant feedback to their customers through ICT related media.
<table>
<thead>
<tr>
<th>Challenge:</th>
<th>Swedish Consulting and IT-Outsourcing Company located in China:</th>
<th>Chinese Consulting and IT-Outsourcing company:</th>
<th>Chinese IT-Outsourcing Company:</th>
</tr>
</thead>
<tbody>
<tr>
<td>What causes the Challenge:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Flaws in the IT-Infrastructure</td>
<td>The firewall and censorship that it invokes.</td>
<td>The firewall and censorship that it invokes.</td>
<td>The firewall and censorship that it invokes.</td>
</tr>
<tr>
<td>In what way can ICT manage the Challenge:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Flaws in the IT-Infrastructure</td>
<td>VPNs, Proxies, Adapted protocols that allow for better internet stability and speed.</td>
<td>VPNs, Proxies, Adapted protocols that allow for better internet stability and speed.</td>
<td>VPNs, Proxies, Adapted protocols that allow for better internet stability and speed.</td>
</tr>
</tbody>
</table>

Table 5.3: Flaws in the IT-Infrastructure.

3. Flaws in the IT-Infrastructure.
The third point of challenge that is brought up to address is flaws in the IT-Infrastructure. All of the case respondents have noticed these flaws in some matter. In all cases they agree that they notice a speed reduction and harder web page access from traffic outside China. Cause of these flaws has in some way to do with the firewall and censorship that stops certain incoming and outgoing internet traffic with China. Some web pages can’t even be accessed or hard to access, like Facebook. In order to manage this challenge with the help of ICT the companies need to use VPN, Proxies and adapted protocols to enhance the stability, speed and security measurements.
### Challenge:

<table>
<thead>
<tr>
<th>Challenge:</th>
<th>Swedish Consulting and IT-Outsourcing Company located in China:</th>
<th>Chinese Consulting and IT-Outsourcing company:</th>
<th>Chinese IT-Outsourcing Company:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Inability to reach the customer when needed through software.</td>
<td>Does have problem with reaching the customers in time, due to the fact that they might not be available.</td>
<td>Does have problems with reaching the customer, but less due to personnel at the customer site.</td>
<td>Does have some problem with reaching the customer at times, but does often have some personnel at the customer site.</td>
</tr>
</tbody>
</table>

### What causes the Challenge:

<table>
<thead>
<tr>
<th>Challenge:</th>
<th>Swedish Consulting and IT-Outsourcing Company located in China:</th>
<th>Chinese Consulting and IT-Outsourcing company:</th>
<th>Chinese IT-Outsourcing Company:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Inability to reach the customer when needed through software.</td>
<td>Users of the different software might not be at their workstations.</td>
<td>Project leaders on customer sites makes it easier to reach the customer. But this creates too much responsibility on just the project leader.</td>
<td>Customers might want to use different communication softwares than the standard. Making it so that a lot of security measures need to take place.</td>
</tr>
</tbody>
</table>

### In what way can ICT manage the Challenge:

<table>
<thead>
<tr>
<th>Challenge:</th>
<th>Swedish Consulting and IT-Outsourcing Company located in China:</th>
<th>Chinese Consulting and IT-Outsourcing company:</th>
<th>Chinese IT-Outsourcing Company:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Inability to reach the customer when needed through software.</td>
<td>Making sure the ICT tools have offline features, protocols with customers of when the software needs to be used or active.</td>
<td>Constant ICT feedback with the project manager on site and with the customers on other fronts, such as others establishing direct customer contact through ICT.</td>
<td>Standardized software settings based on what software most of the customers want to use, to make fast security clearances possible.</td>
</tr>
</tbody>
</table>

Table 5.4: Inability to reach the customer when needed through software.

#### 4. Inability to reach the customer when needed through software.

The fourth challenge is the inability to reach the customer when needed through software. It addresses challenges reaching the customer in time, when necessary. All of the case respondents have in some manner noticed this challenge, where the Chinese companies have personnel at customer site this challenge becomes easier to handle. Cause of the challenges can be in the Swedish case company that customers might not in fact be available at their workstations. Where the Chinese Consulting and IT-Outsourcing Company have a Project manager at the customer site it becomes easier to get in touch, but creates more responsibility in this type of role. At The Chinese IT-Outsourcing Company the customer may want to use third-party communication software’s, which in turn will act out as security measurements. To make these acts less of a challenge with the help of ICT for the companies they need to act in different ways. The Swedish company has to make sure to use ICT tools that have offline
features, to be certain that the customer can respond when they have the time. Further on the Chinese Consulting and IT-Outsourcing Company needs to establish constant feedback and communication with the on-site Project manager and customer to prevent the challenge. The Chinese IT-Outsourcing Company on the other hand needs to concur with the customer about what standardized software’s to be used when communicating with each other, this way they can make fast security clearance possible.
Challenge: Swedish Consulting and IT-Outsourcing Company located in China:


Employees with low English speaking level, challenge to communicate with customers.

Employees with low English speaking level, challenge to communicate with customers.

What causes the Challenge:

Swedish Consulting and IT-Outsourcing Company located in China:

5. Business language barriers. The overall english capacity in China not meeting demands for business communication.

The overall english capacity in China not meeting demands for business communication.

The overall english capacity in China not meeting demands for business communication.

In what way can ICT manage the Challenge:

Swedish Consulting and IT-Outsourcing Company located in China:


Courses via ICT in how to enhance business communication in English. Communication through ICT in English.

Courses via ICT in how to enhance business communication in English. Communication through ICT in English.

Table 5.5: Business language barriers.

The challenges that arise from IT-Outsourcing to China when it comes to Business language barriers became evident fast in the findings as all the cases agree to a certain degree that they have experienced some sort of problems when it comes to the subject. All of the cases do speak English, but the amount of English varies from person to person within the company. The challenge this causes is that the overall English capacity in China does not meet the demands for perfect business communications. However these problems can be managed with the help of ICT by courses that are broadcasted or assisted with ICT media. The courses being focused on how to enhance business communication skills in English. Also practicing ones English skills by communication through ICT media can be greatly beneficial for improving ones English skills.
### Challenge:

<table>
<thead>
<tr>
<th></th>
<th>Swedish Consulting and IT-Outsourcing Company located in China:</th>
<th>Chinese Consulting and IT-Outsourcing company:</th>
<th>Chinese IT-Outsourcing Company:</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Hesitation to outsource based on feelings of losing control.</td>
<td>Customers do appear hesitant but want to work with the company because of the good return on investment it brings.</td>
<td>Customers hesitate a lot because of the distance, especially in the European circuit.</td>
<td>Customers hesitate because of the distance.</td>
</tr>
</tbody>
</table>

#### What causes the Challenge:

<table>
<thead>
<tr>
<th></th>
<th>Swedish Consulting and IT-Outsourcing Company located in China:</th>
<th>Chinese Consulting and IT-Outsourcing company:</th>
<th>Chinese IT-Outsourcing Company:</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Hesitation to outsource based on feelings of losing control.</td>
<td>The great distance.</td>
<td>The great distance, somewhat mitigated because of personnel being at the customer site.</td>
<td>The great distance, somewhat mitigated because of personnel being at the customer site.</td>
</tr>
</tbody>
</table>

#### In what way can ICT manage the Challenge:

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<tr>
<th></th>
<th>Swedish Consulting and IT-Outsourcing Company located in China:</th>
<th>Chinese Consulting and IT-Outsourcing company:</th>
<th>Chinese IT-Outsourcing Company:</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Hesitation to outsource based on feelings of losing control.</td>
<td>Constant project contact through ICT media with the customer to make them feel more comfortable.</td>
<td>Constant ICT media feedback both to the customers and the project leader at the customer site.</td>
<td>Constant ICT media feedback both to the customers and the project leader at the customer site.</td>
</tr>
</tbody>
</table>

Table 5.6: Hesitation to outsource based on feelings of losing control.

### 6. Hesitation to outsource based on feelings of losing control.

With this challenge the companies needs to be observant and act to prevent. The Swedish company notices this from the customers’ points of view, but because of their reputation in the business, the customers feel their work as a good return on investment. The Chinese Consulting and IT-Outsourcing Company also feel this as a challenge at hand and something that needs to tackle, this is agreed by the Chinese IT-Outsourcing Company. The cause of these hesitations from the customers has to do with the great distance. The distance issue is tried to be prevented by the Chinese companies by bringing personnel at the customers’ site. The way ICT can manage this challenge for the Swedish company has to do with constant communication and feedback through ICT, making them feel comfortable. For the Chinese companies this is also one matter to act, but also keeping feedback and communication through ICT with the project manager to make sure for the customer that the project is progressing as specifications.
5.2.3 Overview of acting methods

Figure 5.3: Overview of acting methods
5.3 Theoretical Analysis

The theoretical part of the study made it clear that an Empirical study was necessary in order to be able to find the challenges at hand. The empirical study served as an identification tool and that the field of study needed improvements on how ICT can enable this. To make it clear that there are similarities and differences, 3 tables have been made which analyze and summarizes the results brought up in the different chapters. Another reason of a comparison between the theoretical and empirical studies were to enhance the validity to the thesis, in order to make it clear that there are challenges that need to be clarified and forth so be able to know in which way they can be managed. The theoretical part addressed in the tables has been brought up from the theoretical chapter and serves important theoretical conclusions that has been enlightened.

<table>
<thead>
<tr>
<th>Theoretical:</th>
<th>Empirical:</th>
<th>Similarities:</th>
<th>Differences:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT enhances the work when conducting global business.</td>
<td>All of the case respondents use ICT regularly to conduct their business.</td>
<td>All case respondents use ICT to conduct their business.</td>
<td>All case respondents concur that ICT is a necessity to keep their business successful.</td>
</tr>
<tr>
<td><em>(please concur section 3.1.2 Motivations for using ICT)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge shared through specific portals enhances the project progression.</td>
<td>All of the respondents use some kind of ICT portal to communicate through. Both internal and external.</td>
<td>It can be seen that the portals used enhances information about the project progression</td>
<td>All case respondents concur about this topic.</td>
</tr>
<tr>
<td><em>(please concur section 3.1.2 Motivations for using ICT)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICT enables smooth business appointments via Virtual Collaboration.</td>
<td>All of the respondents agree that ICT enables better opportunities for business appointments.</td>
<td>It showcases that ICT manages to establish a flexible communication.</td>
<td>In Case 1 and 2 only Virtual Collaboration is used. Case 3 and 4 always in some way manage a first contact through face-to-face communication.</td>
</tr>
<tr>
<td><em>(please concur section 3.1.2 Motivations for using ICT and 3.4.2 Developing a successful Virtual Collaboration)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICT enables economic benefits for developing countries.</td>
<td>All case companies have expanded since their start.</td>
<td>All of the respondent companies were rather young and has since their start expanded.</td>
<td>The case companies differ in size and type of IT-Outsourcing conducting.</td>
</tr>
<tr>
<td><em>(please concur section 3.3.3 ICT a tool for economic growth and success)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.7: ICT; Theoretical, Empirical, Similarities and Differences.
The first table enlightens similarities and differences about ICT from the Theoretical points of view and the Empirical case results. The first row showcases “ICT enhances the work when conducting global business”, from the theoretical part (see section 3.1.2). From the empirical part it could be seen that all cases included use ICT regularly to get their businesses to function. This shows similarities from all cases that ICT makes it possible for a successful global business to work.

Further brought up from the theoretical part is “Knowledge shared through specific portals enhances project progression” (see section 3.1.2). From the case respondents it could here be seen that all use some kind of ICT portal to communicate, both internal and external. It showcases that there were similarities between the cases and that this topic enhances information progression and reliability that the project is going on in the right direction, both for the employees and customers.

As it has been brought up from the theoretical chapter how “ICT enables smooth business appointments via Virtual Collaboration” (see 3.1.2 and 3.4.2). Here all of the respondents agree that virtual collaboration makes up for one success and brings better opportunities for scheduling business appointments. But it was also showcased from case 3 and 4 that face-to-face communication is important from the start as well. Differences from this comparison could be seen that case 3 and 4 always in some manner establish face-to-face communication at the startup of their projects and develop the communication from there, to virtual collaboration. In case 1 and 2 this isn’t necessary since their projects don’t last for very long amounts of time.

From the last row of the first table it has been brought up from the theoretical section on how “ICT enables economic benefits for developing countries” (see section 3.3.3). All involved companies in the study had expanded, which shows a business that is growing; a great favor is the constant development of ICT. Even though the differences between company-sizes and type of IT-Outsourcing, the similarities of enhanced business opportunities can be seen.
Theoretical:  
IT-Outsourcing has been growing significantly because of enhanced ICT. *(please concur section 3.1.2 Motivations for using ICT)*

Empirical:  
Case 1, 2 and 3 have a lot of field time and have noticed several changes taking act. All of the case companies had expanded since the start.

Similarities:  
As ICT evolves, new methods develop that can further enhance the Virtual Collaboration.

Differences:  
All case respondents had in some manner experienced developments and enhancements of ICT.

<table>
<thead>
<tr>
<th>Theoretical:</th>
<th>Empirical:</th>
<th>Similarities:</th>
<th>Differences:</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT-Outsourcing has been growing significantly because of enhanced ICT. <em>(please concur section 3.1.2 Motivations for using ICT)</em></td>
<td>Case 1, 2 and 3 have a lot of field time and have noticed several changes taking act. All of the case companies had expanded since the start.</td>
<td>As ICT evolves, new methods develop that can further enhance the Virtual Collaboration.</td>
<td>All case respondents had in some manner experienced developments and enhancements of ICT.</td>
</tr>
<tr>
<td>Offshore IT-Outsourcing provides high quality work to lower-costs. <em>(please concur section 3.2 IT-Outsourcing)</em></td>
<td>All respondents conduct high quality work and manage to lower the costs for the customer.</td>
<td>In all cases quality is the most important factor for the companies, lowering the costs isn’t the primary focus.</td>
<td>All case respondents agree that quality is their primary goal to establish for the customer.</td>
</tr>
<tr>
<td>IT-Outsourcing manage to make companies focus more on their Core Competence. <em>(please concur section 3.2 IT-Outsourcing)</em></td>
<td>All respondents enable more focus on the core-competence for the client.</td>
<td>This shows that even with different variations of IT-Outsourcing it will enable more focus for the customer company’s core competence to grow.</td>
<td>Case respondents 1 and 2 conduct testing only. Case respondents 3 and 4 conducts one-stop-solution for the clients.</td>
</tr>
</tbody>
</table>

Table 5.8: IT-Outsourcing; Theoretical, Empirical, Similarities and Differences.

The second comparison-table states the similarities and differences between the theories brought up and empirical gathering from the view of enhancements when conducting IT-Outsourcing. The first topic addressed states from the theoretical section that “IT-Outsourcing has been growing significantly because of enhanced ICT” *(see 3.1.2)*. Case 1, 2 and 3 had most influence regarding this topic since they had extensive time working in the business field. They had noticed a lot of changes taking act over the years, all of them to the better and their respective company had been growing since they started. This shows similarities on the development of ICT bringing enhancement to the business.

The theoretical section stated that “Offshore IT-Outsourcing provides high quality work to lower-costs” *(see 3.2)*. All respondents found this to be true, but their main focus was to deliver high-quality and in the same way manage to deliver a product with lower cost for the customer.

One great reason brought up from the theoretical chapter was that “IT-Outsourcing manages to make companies focus on their core-competence” *(see 3.2)*. This could easily be seen to be a correct statement. As case 1 and 2 focused to help companies with testing, since they had great knowledge on this, it could be seen that their customers focused on other competence areas. Case 3 and 4 on the other hand delivers a one-stop-solution, where customers get the help needed in their specific case. Even though there are differences in the cases similarities can be seen on that IT-Outsourcing enhances companies to focus and enhance their core-competence.
Theoretical: Challenges in business language barriers. (please concur section 3.2.3 Challenges with IT-Outsourcing)

Empirical: All of the respondents agree that there were language barriers when conducting Offshore IT-Outsourcing.

Similarities: All of the case respondents were taking notice about the language barriers.

Differences: Different acts to prevent these barriers where told.

Knowledge about cultural differences in global businesses. (please concur section 3.2.3 Challenges with IT-Outsourcing)

All of the respondents were taking cultural differences into notice.

It is clear that there are cultural differences that can bring difficulties.

Case 1 and 2 were taking different precautions then case 3 and 4 to prevent the challenges from occurring.

Important business decisions in different cultures are made by different level of management. (please concur section 3.2.3 Challenges with IT-Outsourcing)

Case 1 and 2 wanted all of their co-workers to communicate and act with clients, while case 3 and 4 communicate with the client through a project manager.

Similarities are the way case 3 and 4 work, where the project manager gets more responsibilities.

It showcases that there are differences in which way decisions and communication are reaching out.

IT-Infrastructure has been extensively enhanced the last years. (please concur section 3.3.1 IT-Infrastructure Development)

All case respondents agree that there have been made improvements, but there still is need for more.

All case respondents agree that there are enhancements in the IT-Infrastructure taking act all the time.

It showcases that improvement of the IT-Infrastructure is being done all the time.

Table 5.9: Challenges; Theoretical, Empirical, Similarities and Differences.

The third comparison-table enlightens challenges that have been detected through the theoretical section, to come up with similarities and differences together with the Empirical section. The first challenges from the theoretical section detected were “challenges in business language barriers” (see section 3.2.3). When conducting the empirical study the case respondents made it clear that they were aware of the challenges that this topic can address. The similarities that could be seen were that the companies did acts to try to lower the risks for the impact of the challenges. Were all of the case-companies only employed persons with knowledge or wanted to improve their English. Above this case 4 also had English only policy at the office to improve the skills and awareness of the language.

Further on from the theoretical section it was brought up that “Knowledge about cultural differences in global business” (see section 3.2.3) is a must. The case-companies agreed that it is important to be aware that business is done differently all over the world. Where case 3 and 4 was taking act in the form of hiring a local consultant to make it more comfortable for the customer, this way the difference between the companies didn’t express themselves in the same matter. Case 1 and 2 mainly have customers from Scandinavia which makes this topic
less of a risk for them, but it was important for them even though this to be aware of the challenge.

From the empirical study it was made clear that the topic brought up in the theoretical section about “Important business decisions in different cultures are made by different level of management” (see section 3.2.3) was correct. Case 1 and 2 wanted all of their co-workers to interact with the customers and case 3 and 4 wanted the communication to go through a Project manager. This showcases in case 3 and 4 similarities where the Project manager has a more central role and it is important for the company to hire right man for the task. Further this shows that it was differences in what way business decisions was being made.

The last challenge addressed from the table is called “IT-Infrastructure has been extensively enhanced the last years” (see section 3.3.1). It shows that the case-respondents agree that there have been enhancements being made constantly with the IT-Infrastructure. Where the IT-Infrastructure have been and can become a challenge, it can through the empirical study be seen that with the enhancements taking act, the challenges is being addressed.
6. Discussion

In this chapter the contributions are discussed in relation to informatics and the field of practice. The discussion is based on the findings up until this point as this help clarify the end-result and purpose of the thesis.

6.1 Contributions to the field of Informatics

In this sub-chapter we discuss the contributions that the thesis makes for the field of informatics. We take in account all of the information in the other chapters while using chapter 5 as our base for the discussion.

First of all it is important to discuss why the field of informatics has played such a huge role in our thesis. When this project got started one fact was certain, the thesis would revolve around informatics as it is our major and would fit the best in relation to our research questions. We built the entire thesis with informatics in mind during every step of the process. As ICT is informatics, it is quite noticeable that the research conducted has been related in some form or way to ICT. The thesis has therefore been created for and with the help of informatics, from the theoretical to the empirical work that has led to the analysis, discussion and thereby conclusions that partake in finalizing the results.

Because of the facts stated above one can conclude that the results of the thesis are informatics related as everything was constructed for informatics to this point, and the results have been built on what has been constructed up until now.

As the field of informatics is a wide subject we have focused on parts of informatics that we feel would be relevant in order to get answers for our research questions and build a good structure. If one looks at the information we used when doing our theoretical work, it is apparent that it helped us create a guideline for what we later could use to structure the empirical work. We feel that this contributes to the field of informatics in the way that it helps gather pin pointed information that has been written on our particular subject and then brought this together in order to form the theoretical baseline. Therefore we can say that when it comes to the theoretical findings that already have been established, they can be brought to a presentable frame where they in relation to informatics work together to display the current theoretical outline that we feel can be related to the subject and the research questions. This is a contribution to informatics as it shows some of the fundamental theoretical work that was written on the subject and how these facts later can be applied to how the working field currently is operating in comparison to these facts.

The information that was found in the theoretical aspects of the thesis with relation to our research questions created the guideline for the questions that were used in the interviews. These questions were created on the most important parts of the theory that we felt had holes that needed to be filled. The questions were later presented in field to professionals that work with informatics on a worldwide scale and answered fully. There after presented in the thesis. As these holes were then filled by the case studies that were made in form of interviews, we can conclude that to be a contribution to the field of informatics as the answers of the interviews were presented and analyzed in order to fill the previously mentioned holes that we felt the informatics field lacked in this regard.
As the research is very much targeted to ICT the subject gets brought up in detail, in an explanatory format where the clarifications of what ICT is, how it is used in relation to IT-Outsourcing and how it can get optimized to fit the needs of its user. This in turn leads to the contributions it brings to informatics in the form of ICT being brought to light in regards to the specific field that it is used in, in this case IT-outsourcing.

Another ICT aspect our research points out is how ICT is functioning in a developing country. This is important as informatics plays a huge role in how the country is developing. The findings point out how informatics is helping, how informatics is and can be used to optimize further growth. This creates more awareness for informatics use on different points of views, creating a better understanding for the subject on a detailed level.

In our research we have extensively brought up the subject of virtual collaboration as it is highly relevant to our field. The findings all reflect upon how the current situation is residing within the country and the companies that were involved in the research, displaying how the current situation is functioning and how it can become even better. Thereby the informatics subject is brought to another light upon importance of virtual collaboration.

As our empirical research points out there are feelings of losing control when getting involved with IT-Outsourcing. Therefore a lot of focus has been put on showing why ICT can be used to keep control, not only from communication aspects of controlling the situation, but also from monitoring and sharing commonly known ways of working with informatics to create the outcome that one would wish for when IT-Outsourcing. This is important for informatics as it can create awareness and understanding of how the situation currently is and how it can become. From an informatics standpoint this conducts further assistance in allowing the information to travel on a worldwide scale and thereby concluding how and why ICT is an enabler for IT-Outsourcing.

6.2 Contributions to the fields of Practice

In the following section we discuss the contributions to the field of Practice. The importance of the data collected and compared serves as the main part of the contribution and Chapter 5 of the thesis serves as the baseline.

It is evident that it was necessary to conduct both a Theoretical and Empirical study in order to find out all of the important challenges that exist when working with IT-Outsourcing. This way we could indicate the challenges at first with the theoretical aspects around the matter and from there further on process these aspects through the interviews been made to verify and analyze them. Working this way we established important knowledge in what way ICT can be involved to hinder and make the challenges less of a risk when considering offshore IT-Outsourcing business. In the field of practice means, this serves as an improved way of working with IT-Outsourcing.

With the knowledge gained in the area we could sort out the different challenges and analyze them to certify what causes the challenges and further on discuss in what way ICT can make up for improvements to avoid the challenges in these respects. To certify and address the cause of the challenges made it clear that people working in the business can be more observant in this matter and be cautious for them not to occur. Above this to help employees and employers in the case even more clear how to act if there is suspicions of the challenges.
addressed can or will take act, it was important to be advised in what way ICT can act as a tool to mitigate challenges.

With the advices and current challenges taken into notice, further enhancement of IT-Outsourcing could be taken into act. A higher potential of development success for IT-Outsourcing to China can be the case and more persons can be hired as more companies can assess China with a less risk to establish IT-Outsourcing to.

Further on as several of the challenges and advices brought up can be addressed to similar companies that manage IT-Outsourcing business between a developing country and a westernized country it is in fact important to state that these clarified challenges and advices can serve as a tool to further enhancement and development of the business. Above this it is of significant manner that the result can serve as a way to improving the globalization between nations worldwide.

Throughout the process, results have been showing that it is evident that core competence is one major important reason why companies consider IT-Outsourcing. To be able to concentrate the work to the process where a company’s main focus lies has made IT-Outsourcing an important solution and shows that it’s becoming a more attractive decision to make. Hence an important fact like being able to focus on the core competence, it can be seen that customers want awareness about the working process and be secure that the work is progressing as they wish according to the specifications that has been set. The results in this case have been shown that ICT enables this awareness in a smooth way for the involved parts. Communication and real-time information through ICT portals has enhanced the awareness about in what way the project is progressing. To be able to communicate and track the project constantly enhances the collaboration and keeps the awareness high for the involved.

As ICT improves the way to keep control that the virtual collaboration is going in the right direction, it can certainly be stated that the results gives an impact of enhancement when conducting IT-Outsourcing.

Concentrating on the research questions layout it can be seen that enhancement in the fields of practice in the business is of major focus, therefore with these statements at hand it can be seen that the results also can be contributed to improvements in what way challenges can be mitigated with an efficient ICT collaboration.

Following how roles and communication has been addressed, the process turned out to show that business was conducted differently in the different cases. As for one company it was important for all colleagues to communicate efficient with customers, this was not the case for the other companies. Where they wanted more control from a Project Manager. This was in fact something that can be troublesome due to the importance of this role; the results therefore enlighten this matter to make the communication barrier less of an obstacle.
7. Conclusions, Evaluation and Further research

In this chapter the conclusions of the study is presented. This is followed by the limitations of the study and then suggestions on further research.

7.1 Conclusions

The conclusions are based upon our research questions and purpose with the thesis with our findings as the baseline for answering the questions, this to conclude if the questions have been answered, why and how they have been answered.

If we look at our main research question (What is the current status with IT-outsourcing to China in relation to ICT and what challenges exist? How can these challenges be managed with the help of ICT?) It becomes quite evident that the thesis is focused on different venues that all have questions that need to get answered. To figure out these venues better we have divided the question up into three different sub-questions (RQ1.1: What is the current IT-outsourcing status in China? RQ1.2: What causes the challenges? RQ1.3: In what way can ICT help manage these challenges?) These sub-questions all have different areas that they cover.

When looking at our purpose (see chapter 1.4) it is easy to conclude that it directly relates to the research questions hence the reason to why these questions are so highly important for conducting a successful result for the thesis. The purpose talks about the current situation when it comes to IT-outsourcing in China and how it is important to establish a baseline of facts to conclude a mapping of the situation. Then goes on to talk about how this baseline can help present the challenges that exist and also the cause of the challenges. This is important as it is essential for figuring out in what way ICT can help manage these challenges. This has therefore become the base for our entire thesis as it is the reason to why the thesis has been conducted in the first place.

With this being said the first part of the research questions (RQ1.1: What is the current IT-outsourcing status in China?) have been answered within several parts of the thesis as it is a huge part that eventually helps gather the necessary information to solve the other research questions. First of all the theoretical element of the thesis answers this question by displaying the current situation on several parts of how IT-outsourcing is currently functioning when it comes to theoretical material on the subject (see chapter 3) a lot of statistics and facts on the growth of IT-outsourcing to China is displayed and other important findings such as how the current situation is functioning within IT-outsourcing. The gaps in the theory later showed why we needed to perform empirical research on the subject. This later led to the possibilities of using the theoretical findings to compare to the empirical findings in order to establish validity on how reliable the theoretical framework eventually became and established a better understanding on how the situation actually is when it comes to IT-outsourcing. This was done by tables that compared and displayed the results in an easy way (see chapter 5.3). The founding’s showed a lot of concurring results from the people interviewed and the theoretical statements that were presented in the thesis (see chapter 3), we found the reason to this being that the theoretical elements showcased current and accurate data that then was presented to
the interviewees in a way that they could easily reflect upon how relevant the statements were for their company. We feel this to be more of a reason to why the interviewees concurred with the theoretical statements over any sort of cultural standpoint that would prevent the interviewees to hesitate on not concurring with the statements as the interviewees always gave their perspective on the subject and talked about how the statement was relevant for their company and in what way the statement was relevant (see chapter 4). This made it possible for the theoretical analysis to be conducted in an accurate way that would solidify the results on this front. The analysis was divided into three different sections all with the difference between theoretical aspects and empirical aspects in mind (ICT, IT-Outsourcing and Challenges). These aspects are answered in their own way with tables (see chapter 5.3) to showcase the conclusions in an easy to understand manner. This then acts as the reason to why our research questions can be answered from a theoretical stand-point compared to an empirical stand-point, all of these facts can thereby produce reasons to what the current situation is with IT-outsourcing, what challenges exist and also later we talk about how these challenges can get managed with the help of ICT (see chapter 6.0).

When looking at the empirical analysis we can conclude that our research questions have been answered by six different challenges that arose from conducting the research, these were presented and analyzed with their own tables to better show traceability (see chapter 5.2.2). The current situation is discussed on the analysis (see chapter 5) to answer the first research question. This showcases in in a detailed manner step by step on how the IT-Outsourcing situation is currently operating based on the guidelines that were established previously throughout the thesis.

The second research question to what causes the challenges is first discussed in a pure text format (see chapter 5.2) then later these causes have been displayed in a more condensed way (see chapter 5.2.2). These causes are important as they later will assist in answering how the challenges can be managed. The last part of the research question is answered in the form of tables (see chapter 5.2.2) where they also have text explanations underneath the actual tables.

The conclusions of the thesis being that all of the research questions were answered and displayed in either text form, table form or model form.

7.2 Limitations

Due to the facts that the challenges at hand for the different cases could be managed with the help of ICT, it could be potential to implement the advices given in chapter 5. This makes up for one limitation, because of the reason that the study did not cover the implementation and the validation of these advices been made.

In order to cover the implementation of the advices there was needed to be conducted an observation at the different companies, but due to technical reason this was not possible to conduct in this particular study. Therefore this limitation also acts as a reason for further research.

Another limitation made was that this study is concentrated on the supplier side of the cases, in order to be able to bring the whole point of view it is important to also include a customer’s
thoughts of challenges and suggestions for improvements. Also this limitation serves as a reason for future research.

7.3 Suggestions for Further Research

As stated above there was limitations in this study. Two limitations opened up the possibility for further research based on this study. The first limitation was the facts that the advices brought up wasn’t implemented at the companies and has therefore not been tested. To continue further research the advices brought up in this study can serve as a baseline to be implemented and tested if it can act as enhancements stated from this research. As the advices brought up has been compared and analyzed with both theoretical and empirical data, it can further be measured by an implementation.

The second limitation that can serve as a suggestion for further research is the important opinions from the customers’ points of view about challenges and suggestions for improvements in the area. With both sides of the coin at hand, this study regarding the supplier side can be compared with the future research about the clients matter for improvements in the business.

It is also important to state that this study was conducted in China and therefore the two suggestions brought up above shall also be conducted in a similar matter, also to serve between Sweden and China. With this in mind the future case will provide the best results for improvement in the area.

Above these suggestions for future research, another one can provide similar challenges in another developing country to compare with a western country in order to find out similarities between the cases. Where this study can act as a baseline to make up for the new research case and be compared with each other, to find similarities and differences. This research can be important due to the reasons that every case-country can be unique and in order to see similarities or differences between the cases it can hopefully become easier to enhance the business.
References:


Moser, K. S. (2013). Only a Click Away?—What makes virtual meetings, emails and outsourcing successful. Management Articles of the Year, 25.


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Appendix. Interview Questions.

Starting the interview by asking general questions about the respondent and the company.
Describe your role at the company?
What are your responsibilities?
How long have you been working in the specific field
Can you give us a general definition of your company?
About how many employees is currently working at your Chinese office?
Do you manage on, near or offshore outsourcing?

Follow up the questions by asking outsourcing questions in relation to ICT.
1 - Could you please give us a fast summary of how you work in general?

2 - Do you have an iterative way of working or is there a primary focus on working in certain planned steps? Such as preparation, design, etc and moving through these steps.

3 - Do you produce a big plan together with the customer and give feedback on how the project is going (Weekly/Monthly) or do you work with the customer steadily on a day to day basis?

4 What factors do you think is key for you to establish good communication with the customer?

5 What do you think are the biggest factors for customers to choose your company to do business with over other companies?

6 About how long does your contracts last in general with the customer? Are these often extended?

7 Is it necessary to establish connection via face-to-face communication or is the virtual communication enough for a trustworthy connection with the customer?

8 How do you think your customers experience the results from your work? economically-gaining, flexible, positive for their core business or more / something else that would attract them to work with you?

9 What challenges do you feel can arise when it comes to the customers expectations and your expectations towards the customer?
10 Do you notice any cultural difference? Language-barriers, dissidents, other ways of working.
  *If so, do you see this as a major hindrance and how can this get improved?
Finish the interview by asking questions about virtual collaboration.

11 What internal communication methods do you use?

12 What type of virtual Communication methods do you use/work with to communicate with the customer?

13 Which types of virtual Communication tools do you prefer using and why?

14 Have you noticed any flaws? What are they? How do you think these can get prevented?

15 How do you feel about the current IT-Infrastructure in China? Do you experience any challenges? Such as latency etc? Do you think there is any way to fix these problems?

End.
Högskolan i Borås är en modern högskola mitt i city. Vi bedriver utbildningar inom ekonomi och informatik, biblioteks- och informationsvetenskap, mode och textil, beteendevetenskap och lärarutbildning, teknik samt vårdvetenskap.

På institutionen Handels- och IT-högskolan (HIT) har vi tagit fasta på studenternas framtidiga behov. Därför har vi skapat utbildningar där anställningsbarhet är ett nyckelord. Åmnesintegration, helhet och sammanhang är andra viktiga begrepp. På institutionen råder en närhet, såväl mellan studenter och lämare som mellan företag och utbildning.

Våra ekonomiutbildningar ger studenterna möjlighet att lära sig mer om olika företag och förvaltningar och hur styrning och organisering av dessa verksamheter sker. De får även lära sig om samhällsutveckling och om organisationers anpassning till omvärlden. De får möjlighet att förbättra sin förmåga att analysera, utveckla och styra verksamheter, oavsett om de vill ägna sig åt revision, administration eller marknadsföring. Bland våra IT-utbildningar finns alltid något för dem som vill designa framtidens IT-baserade kommunikationslösningar, som vill analysera behov av och krav på organisationers information för att designa deras innehållsstrukturer, bedriva integrerad IT- och affärsutveckling, utveckla sin förmåga att analysera och designa verksamheter eller inrika sig mot programmering och utveckling för god IT-användning i företag och organisationer.

Forskningsverksamheterna vid institutionen är såväl professions- som design- och utvecklingsinriktad. Den övergripande forskningsprofilen för Institutionen är handels- och tjänsteutveckling i vilken kunskaper och kompetenser inom såväl informatik som företagsekonomi utgör vita grundstenar. Forskningen är välrenommerad och fokuserar på inriktningarna affärssamverkan och Co-design. Forskningen är också professionsorienterad, vilket bland annat tar sig uttryck i att forskningen i många fall bedrivs på aktionsforskningsbaserade grunder med företag och offentliga organisationer på lokal, nationell och internationell arena. Forskningsens design och professionsinriktning manifesteras också i InnovationLab, som är institutionens och Högskolans enhet för forskningsstödjande systemutveckling.