

# Exploring communication challenges in global IT-projects

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# **Exploring communication challenges in global IT-projects**

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# Executive summary

In order to work successfully together, it is important that people understand each other. In global IT-projects, different team-members, with diverse cultural backgrounds, work from different locations. A consequence of this is that the synchronous, face-to-face communication that you can see in project where everyone are located in the same room, is highly restricted. The global environment add to the communication challenges and potential misunderstandings.

Previous research about global IT-projects focuses a lot on the different challenges, including communication. Having worked as an IT-professional in global projects myself; I had a desire to explore what people do to *mitigate the communication challenges*.

I did qualitative research in two of the leading countries in global IT-offshoring, Indian and the Philippines, as well as in my home country Norway and Denmark. The informants are all IT-professionals with experience from global projects. They shared their knowledge regarding what is the main communication challenges and how they overcome the challenges.

The main challenges pointed to by my informants are challenges in the communication process. When communicating with people from different cultures, at a different location, there is a higher risk for misunderstandings. This can be because of problems in understanding specific accents and words, due to translation or use of native language. Challenges occur due to different use of irony and misunderstanding of non-verbal signals. Lack of proper technical infrastructure also lead to communication problems. Other challenges includes that of information overload and opportunistic behaviour.

Challenges are mitigated by changing the communication process. Confirming the message, repeat it or rephrase it are three ways to do this. Improved technology also help to ease the communication.

It is my hope that this thesis can help other IT-professionals with communication in global IT-projects. This thesis might act as a starting point in order to plan the communication properly.

# Preface

Many students state that writing a thesis is like a journey. In my case, this is surely true. This has been a long journey, both in time and space.

My interest for other cultures started already at the age of five. This was when I read the book about Ante, a Sami (native Norwegian) boy (Dahl, 1975). When other boys ran around in the streets, playing firefighters or police I quite proudly said, “I want to be a Sami!” This interest has not decreased later. When I finally decided to write a master thesis it was easy for me to choose a subject related to how different people interacts.

Many people helped me in my work. First, I must thank all my informants. Thanks a lot for spending time with me when I disturbed your work and asked all the questions.

A huge thank to my supervisor at the University of Oslo, Hanne Cecilie Geirbo. You were always there when I needed help, regardless of your own deadlines! You came up with many creative suggestions, which significantly improved the final product. Big thanks also to my dad. Not just for being a dad and supporting me, but by being a psychologist by profession he knows a lot about communication and gave me valuable input.

During the work with this thesis, I was fortunate to get help from a number of academic experts. These people include Prof. Magne Jørgensen (Simula), Prof. Sundeep Sahay, Prof. II Lars Groth, Postdoc Bjørn Erik Mørk (all University of Oslo), Dr. Brian Nicholson (The University of Manchester), Dr. Wolfgang Messner (Mysore Business School), Marit Anti (Oslo School of Management), Nils Brede Moe (Sintef) and Ass. Prof Inge Hermanrud (Hedmark University College).

From 23<sup>rd</sup> to 27<sup>th</sup> of March 2014, I participated at Global Sourcing Workshop in Val d’Isère. Here I meet a number of excellent people who helped and motivated me in the work with this thesis.

In the period between 2010 and 2012, I lived in India and worked for Capgemini India. During my stay in India, I met many nice people and made a number of friends. I had a number of good conversations and learned a lot from all of you. It is difficult to mention some, because I might forget others. However, I would like to particularly thank the following former colleagues: Patrick Christiaens (Capgemini France), Amit Athawale, Anuj Kumar,

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Finally yet important, I must thank all my friends in Oslo, Mumbai, Pune, Chennai, Manila and London. I have had a number of very good informal conversations with many of you, which really helped in writing this thesis.





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# 1 Introduction

## 1.1 Background for selection of the topic of research

The Indian outsourcing revolution started back in the late 1980s (Friedman, 2006). The chairperson of General Electric went to India in 1989 and was completely taken by India as a source of intellectual capital for GE. He said, “We spend a lot of money doing software. Couldn’t we do some work for our IT department here?” (Friedman, 2006, p. 129).

Outsourcing is defined as “a process whereby an organization decides to contract-out or sell the firm’s IT assets, people and/or activities to a third party supplier, who, in exchange, provides and manages these assets and services for an agreed fee over an agreed time period” (Kern & Wilcocks, 2002). Offshoring is the use of staff in other countries and is often associated with India, China and the former Soviet Union (Kusmaul, Jack, & Sponsler, 2004). In addition to cost savings, offshoring is also supports growth strategies, competitive pressure and give companies better access to qualified personnel (Lee & Kim, 1999; Lewin & Peeters, 2006).

Gartner forecasted the IT outsourcing market to reach \$287 billion in 2013. A 6.5 % annual growth rate is expected from 2013 through 2017 (Gartner, 2013). During the 1990’s the offshoring wave also hit Europe. Norway has been a latecomer in this area (Imslund & Sahay, 2005). This is changing and the number of offshoring deals in Norway increases rapidly (Computerworld, 2013). KPMG estimated the Nordic off-shoring market to reach about 5 billion SEK in 2012 (Hallström, 2012).

My interest for off shoring started in 2007 when I joined Capgemini<sup>1</sup>. As a newcomer to Capgemini, I learned about the concept that Capgemini entitle Rightshore®, which means

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<sup>1</sup> Capgemini is the seventh largest global IT service provider (Capgemini, 2012). IT services refers to the application of business and technical expertise to enable organizations in the creation, management and optimization of or access to information and business processes.

The IT services market can be segmented by the type of skills that are employed to deliver the service (design, build, run). There are also different categories of service: business process services, application services and infrastructure services.

using the right person from the right location for a specific task (Capgemini, 2012). At the summer of 2010, I moved to Mumbai to live there and work for Capgemini India. During my time in India I worked as an offshore middleman as “someone who can facilitate the exchange of expertise across two groups who hold different goals, values, and technical languages” (Mahnke, Wareham, & Bjorn-Andersen, 2008, p. 18) between my Indian colleagues and my Norwegian colleagues.

Previous research about off-shoring points at communication as one of the biggest challenges (A. T. Kearney, 2007). Soon Ang and Andrew Inkpen find in their study that people who work according to global delivery models spend 50 % of their time on ad-hoc collaboration and ad-hoc communication with global colleagues. They spend 57% of the time to make sure that all involved parties understood the task properly. As much as 32% of the ad-hoc communication is used to solve conflicts and other issues. Only 8 % of the time is used to collaborate about the development of the product and only 3 % on coordination and planning of future meetings (Ang & Inkpen, 2008).

## 1.2 Problem description

Based on the introduction in the previous section I feel there is a need to study such communication challenges further (Creswell, 2007). The following research question is the foundation for this thesis:

- **How does workers in global IT-projects mitigate communication challenges?**

## 1.3 Limitations of the thesis

To create some boundaries for this thesis has been a very difficult task. I initially (maybe a bit naively) wanted to do research in many of companies in many countries. My supervisors at the University of Oslo recommended me not to do this, but to focus on one single case. Based on their suggestion I tried to interview people in only a few selected companies.

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If these services are outsourced, they are referred to as business process outsourcing (BPO), applications outsourcing (AO) and infrastructure outsourcing.

Handling of suppliers is one of the most important capabilities of a customer (Lacity, Khan, & Willcocks, 2009). Research shows that among clients that disputed with vendors, nearly four-fifths said that they would “strengthen their ability to manage the vendor” (Michell & Fitzgerald, 1997, p. 232). In order to avoid communication challenges due to conflicts between client and vendor I decided to focus mostly on internal communication.

The research is limited to people who work in projects, defined as “A temporary endeavor undertaken to create a unique product, service or result” (Project Management Institute (PMI), 2004, p. 442). The opposite of a project is operational work, which is “ongoing and produce repetitive products, services or results” (Project Management Institute (PMI), 2004, p. 22). Other stakeholders (e.g. customer, sponsor, performing organization, or the public) (Project Management Institute (PMI), 2004, p. 450) are not within the scope of this study. I do fully accept that people outside the core project team might have caused problems in the project, including communication problems. This is a separate challenge, which is too complex to look into in this study.

## **1.4 Motivation for the thesis**

My previous nor current employer does not influence the topic of the thesis and I do this purely as a student at the University of Oslo.

Having lived abroad and in a multicultural society, I have faced the communication challenges in global IT-projects myself. Research indicates, “Missing or poor communication is one of the most common characteristics with multicultural groups and organizations” (Glasø & Aases, 2009). In Norway, there has been a debate regarding whether or not there are any economic gain in offshoring. India is mentioned as one of the countries that Norwegian companies struggle with (Sintef, 2012). The fact that other countries manage to work with India is interesting. Is the problem not the way the Indians works, but just as much the way Norwegians works? Problems in the communication seems to be one of the main barriers. By interviewing people in different countries, I hope to be able to learn something about what others do to mitigate communication challenges.

## **1.5 Expected contribution**

Previously research in the area of global IT-projects seems to focus on a number of different challenges in such projects (Nicholson & Sahay, 2001; Hanisch & Corbitt, 2004; Imsland & Sahay, 2005; Winkler, Dibbern, & Heinzl, 2008; Moe, Smite, Hanssen, & Barney, 2013; Sahay, Nicholson, & Krishna, 2003). Most of these studies have a scenario with a customer-vendor situation. In a customer-vendor situation, the different companies will have different objectives. A review of the IT outsourcing literature indicates that a customer-vendor situation affects the risk in the project (Lacity, Khan, & Willcocks, 2009). This in itself affects the communication and can be an obstacle. By trying to remove the customer-vendor factor, I would like to focus on core communication challenges in multi-located organizations.

Based on this I feel there is a need to study the mitigation of such challenges, rather to focus mostly on the challenges itself. As this thesis is part of an experience-based master program it is important to use an approach, which might be useful in practice, and not just a theoretical approach. The few articles I have seen where mitigation has been the topic discuss mitigation of communication challenges in one specific setting, like in knowledge transfer, rather than focusing on generic ways to mitigate this challenge (Wende, Philip, Schwabe, & King, 2013). I feel there is a need to study the mitigation of communication challenges from a more generic point of view, which is the topic for this thesis.

My hope is that others might use this thesis as a way to gain insight into what others do to mitigate communication challenges. By reading this thesis, I hope that they can get some hints on how to plan their communication.

## **1.6 Structure of the thesis**

This thesis contains six chapters. In chapter 2, I present the theoretical framework for the thesis. This chapter acts as a foundation for the rest of the thesis. I look into a critique of the different theories. Chapter 3 is about research method and data. I describe why I chose the actual method that I did and the data collection process. Some thoughts about whether or not this was the best possible method and the best data is included. I present my findings in chapter 4. The findings are discussed in chapter 5. Here I compare my findings with the theory described in chapter 2. This thesis is summarized in chapter 6 where I describe my main findings and some thoughts about potential further research in this area.



## 2 Theory

This chapter presents the most important theory used in this thesis. The most important terms in this chapter are communication and culture. In addition, the term offshore middleman is presented. Explained is also how modern technology affects communication.

In the subchapter about communication, I describe a common model on communication. Theory regarding selection of the most appropriate communication channel is presented. I also look into different challenges in the communication process.

The next subchapter explains culture. How culture affects communication is described at the end of this section.

An offshore middleman is a person who has as a role to work as a bridge between teams from two or more different locations/cultures. The role of the middleman is described next.

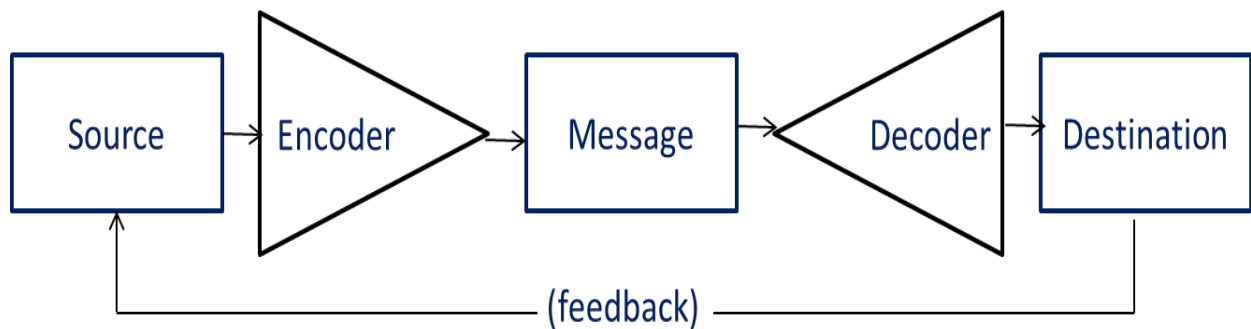
Structuration theory is a theory about how society influences people and how people influences the society. As communication is dependent on the society, this theory is included in this chapter. Likewise is the increased globalization something that also affects the communication. The fact that people now move more than before also affect how we communicate.

### 2.1 Communication

Communication is an important part of the daily life for all living creatures. It is impossible not to communicate (Argyle, 1972). Animals communicate (Blomquist & Amudin, 2004). Even babies communicate. Their cry is a simple way of communicating (Stern, 1977). The problem with baby cry is that it is difficult for other people to interpret what they actually mean. It can mean that they are hungry, that they want to sleep, are too warm or too cold. A simple cry can mean almost anything. When children grow older, they start to make drawings which is a more advanced way of communicate (Groth, 2005, p. 35). As is described in this thesis, the interpretation is an important part of any communication. When we communicate across different cultures, the interpretation can be just as difficult as in the case of babies (Thomas & Inkson, 2009).

There are many different ways to communicate. When we talk about communication in our day-to-day communication, we often think about verbal communication. However “research has shown that at least 75 % of all communication is non-verbal” (Trompenaars & Hampden-Turner, *Riding the Waves of Culture*, 2011, p. 76).

The most common and maybe simplest model for communication process is the Shannon-Weaver model as described by (Schram & Roberts, 1974, p. 23). The two electronic engineers Claude Shannon and Warren Weaver back in the 40’s developed this model. The model was initially developed in order to describe electronic communication but is today used for any kind of communication (Lundheim, 2010, p. 87). Communication can simply be defined as a situation where a source transmits a message to a receiver(s) with conscious intent to affect the latter’s behavior (Miller, 1976).



*Figure 1 Shannon-Weaver model for communication*

This model shows the different phases of communication between two people, the sender and the receiver. In the original model, there was only a one-way communication. Feedback came later. The model is labeled as the S-M-C-R model, which stands for Sender-Message-Channel-Receiver (Berlo, 1960).

The source is the originator of the message (Rogers & Agarwala-Rogers, 1976, p. 11). It may be an individual or several individuals working together, such as a television news team. A source may also be an institution or an organization, although even then individuals are ultimately the sources, even though they are acting in an organizational role.

Communication starts when the sender encodes the information. “Encoding involves the selection of symbols (verbal or non-verbal signals) that transfers the information to the receiver” (Jacobsen & Thorsvik, 2007, p. 252).

The message itself is the stimulus that the source transmits to the receiver. Messages are composed of symbols that have a certain meaning for the source and, ideally, also for the destination. Many messages are expressed in the form of language symbols, but the symbols may also be nonverbal, such as hand or facial gestures, other body movements, or pictures. Meanings are references such as ideas, images, and thoughts that are expressed in symbols (Trompenaars & Hampden-Turner, 2011, p. 74).

After the sender<sup>2</sup> has decided what to send and encoded it, the right channel has to be decided. “A channel is the means by which the message travels from a source to a receiver. It is the path through which the message is physically transmitted.” (Rogers & Agarwala-Rogers, 1976, p. 12). Should the message be sent written or verbally? Should we use formal or informal channels for sending the message? There are many different channels to choose between and a number of conditions that affects what channel to use (Jacobsen & Thorsvik, 2007, p. 252). I will discuss the selection of appropriate communication channel in a later section.

After the message is encoded and sent through the right channel, it will reach the destination (receiver). The receiver is the most important single element in the communication process. Communicators (sources) often forget him (Rogers & Agarwala-Rogers, 1976, p. 12). Depending in the message and the channel there might be one or many receivers. If there is more than one receiver, there is a chance that each of them decodes the message different. Decoding is the process in where the receiver interprets the message encoded by the sender. Effective communication is a situation where the receiver interprets the message in accordance with the intentions of the sender (Jacobsen & Thorsvik, 2007, p. 252). The final part of the communication process is feedback. Feedback is a response by the receiver to the source’s message (Rogers & Agarwala-Rogers, 1976, p. 13). Another way to describe this is to turn the model the other way. The receiver in the first situation has now become the sender and the initial sender has become the receiver. The communication process has now changed from a one-way communication to a two-way communication.

What kind of feedback is the best feedback? A simple answer would be that feedback that has some effect is the best feedback. Some say that in order to, “Achieving effective

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<sup>2</sup> In the literature both sender and source is used for the same. Destination and receiver are also used as synonyms. In this thesis, I have used the actual word as it is being used in the different books and articles. The meaning should always be the same.

communication, negative feedback is more important than positive feedback” (Rogers & Agarwala-Rogers, 1976, p. 13). Rogers and Agarwala-Rogers do not give any good reasons on why negative feedback is most efficient. Other writers warn about negative feedback (Steiro, 2006). He says that in some organizations feedback is only seen as punishment (Steiro, 2006, s. 37). It is clear that the intention behind the feedback is important for the result of the feedback (Grenness, 1999, pp. 195 -). The relationship between the person who give feedback and the sender (now receiver) is also important. In a work-related situation, giving feedback is an important part of being a manager/leader. Like any other management situations, how you give feedback will depend on the situation (Berg, 2011).

It is also a case that negative feedback is culture dependent. In some cultures, negative feedback is seen as an attack on the person who receives it (Engholm, 1991). It is maybe not surprising that an American author (Rogers) encourages negative feedback while a Norwegian author (Steiro) warns about the same. More about this importance of cultural differences when given feedback is discussed later.

A message might become contaminated. This is the concept usually called *noise* (Schram & Roberts, 1974, p. 26). It is usually defined as anything in the communication channel that the sender did not intentionally put there.

It is important to distinguish between communication and information. It could be tempted to think about these two terms as the same. However, there might be communication that not is informative (information). One common definition of information is that it is reduction of uncertainty (Daft & Lengel, 1986). Grenness suggest a different definition, “Information is a difference that makes a difference” (Grenness, 1999, p. 12). My understanding of Grenness is that he states that not all communication means information. The communication will only be informative if it can be used to affect some change. People receive a number of signals that the person does not relate to. This will still be communication but will not be information.

When the sender sends a message to the receiver, the sender hopes that the message will have some effect. There are usually three different effects that the communication can have (Rogers & Agarwala-Rogers, 1976, p. 13):

- 1) Changes in the receivers’ knowledge
- 2) Changes in receivers’ attitude
- 3) Changes in receiver’s overt behavior

These three changes usually, but not always occur in sequence; that is, a change in knowledge usually precedes a change in attitude, which precedes a change in overt behavior. However, if the receiver decodes the message differently than how the sender wants it to be decoded, we will have a situation with some misunderstanding.

### **2.1.1 Critique of the Shannon-Weaver model**

Some people have criticized this communication model (Chandler, 2008). He has four doubts to this model:

- It assumes communicators are isolated individuals
- No allowance for differing purposes
- No allowance for unequal power relations
- No allowance for situational context

The main critique from Chandler is that this model is useful only as a technical representation of communication. Some commentators have later stated that this model has a much wider application to human communication than a purely technical one. My understanding of Chandler's critique is that it is not primarily a critique of the model as such but more of the usage. I have no problem to agree that the model is simple, and maybe even too simple if we want to use it in a broader way. As shown in section 2.3 differences in cultural fields is one thing that can affect communication, which is not described in the Shannon-Weaver model. As we will see in the following sections, this simple model does not explain all aspects of communication. However, I do still feel that it work quite well as a simple model for communication.

### **2.1.2 Use of different communication channels**

When a sender wants to decide the proper communication channel, he/she can choose between numbers of different channels. Traditionally it was common to distinguish between channels for written and oral communication (Jacobsen & Thorsvik, 2007, p. 253). There are two main reasons for this. The first reason is that when people communicates face-to-face both verbal and non-verbal information is communicated through the body language, how people look at each other, their voice and so on (Short, Williams, & Christie, 1976). There might be a mismatch between the verbal signals and the non-verbal signals, which makes it

difficult for the receiver to interpret what is the actual meaning. The second difference is related to media richness. The biggest drawback with written communication (like e-mails and letters) is that it is restricted how much information one message can contain. It will also take more time to receive feedback on the message.

Research indicates two reasons for organizations to produce information (Daft & Lengel, 1986). The first reason is to reduce uncertainty. Uncertainty has come to mean the absence of information. Uncertainty is “the difference between the amount of information required to perform the task and the amount of information already possessed by the organization” (Galbraith, 1977). The second reason is to avoid equivocality. Equivocality presumes a messy, unclear field (Daft & Lengel, 1986, p. 554). Even with addition of new information, the situation might still be unclear. Managers reduce the uncertainty by defining or creating an answer rather than by learning the answers from the collection of data.

Daft and Lengel points out that the purpose of the communication should affect the communication channel. If the ambition is to reduce uncertainty then less rich data at impersonal media like rules and regulations communicated through formal reports is best. If at the other hand the ambition is to reduce equivocality (to specify further) then more rich, personal media like group meetings, ideally face-to-face is recommended.

The media richness theory has been criticized for being too narrow in more recent studies. This model has been criticized for presenting a functionalist, static and rational view of the communication process (Lee A. S., 1994; Markus, 1994). In the media synchronicity, theory five dimensions (feedback, symbol variety, concurrency, persistence and rehearsability) which affect the communication is identified (Dennis, Valacich, Cpeier, & Morris, 1998). They states that no medium has the highest value in all dimensions (i.e., none could be labeled as richest in Daft & Lengel’s terms). They go even further and say, “Concluding that face-to-face communication is the richest media is inappropriate” (Dennis, Valacich, Cpeier, & Morris, 1998, p. 51).

Another theory is the channel expansion theory (Carlson & Zmud, 1999). These authors state: “As individuals develop experience communicating with others using a specific channel, such as e-mail, they may develop a knowledge base for more adroitly applying this communication channel”. Based on this, it can be said that the “perception of richness can change over time as

team members develop familiarity and shared language for communication with each other” (Maruping & Agarwal, 2004).

### **2.1.3 Communication challenges**

In this thesis, I focus on three different categories of communication challenges (Jacobsen & Thorsvik, 2007, p. 256). The first kind of challenges are related to the communication process as such. The second kind of challenges is the situation where the receiver actually gets too much information, also described as information overload. Finally, there can be communication challenges due to opportunistic behavior.

#### **Challenges in the communication process**

The ideal situation is a situation in which the sender codes the message in such a way that it both truly states what the sender means and that the receiver is able to decode it correctly. There are however many reasons that coding can lead to communication challenges. One might be that the sender uses words, expressions or jargon that expresses something different from what the sender actually thought he/she described. A second challenge might be that the sender chooses to express himself in a way that the receiver does not understand the same way and that the message then is being interpreted differently than what was the intention. It can also be a challenge if the sender expresses himself in a way that does not build confidence at the receivers end. The receiver then might be skeptic and reject the message.

Communication challenges might also happen due to the selection of communication channel. These challenges can briefly be divided into three areas. First, it might be that the chosen channel is not suited for the actual message (Daft & Lengel, 1986). This will prevent important information to reach the receiver. Secondly, it might be that the channel restricts the possibility for feedback and hence reduces the possibilities of a two-way communication. Third and final the channel might involve more actors, which might lead to manipulation and change of the information before it reaches the receiver (Rogers & Agarwala-Rogers, 1976, pp. 92-95).

Finally, challenges in the communication process can also happen when the receiver decodes the message. As stated above, challenges related to coding of the message will also affect the decoding of the message. Other aspects also can affect the decoding. Lack of attention will hamper the receiver’s ability to decode the message correctly. A study showed that students

only paid attention to the lecturer 20% of the time (Grenness, 1999, p. 133). Another challenge in correct decoding of a message is what is called selective perception (Kaufmann & Kaufmann, 2007, p. 307). The receiver interprets the message according to her own point of view. Our experience, feelings, needs and motives affects our understanding of the sender's message in such a way that we pay more attention to some of what is being stated than we do to other parts. Our expectations to the sender and the sender's trustworthiness also affect how a receiver decodes the message. For example if you have a manager who most often only gives criticism, then some positive feedback will probably be seen as sarcasm (Kaufmann & Kaufmann, 2007, p. 308). Any information from a quite less trustworthy colleague or manager will most often almost be ignored, even if it might be important.

### **Information overload**

There is no universal agreed definition of the term information overload (Edmunds & Morris, 2000, p. 18). It can mean several things such as having more relevant information than one can assimilate or being burdened with a large supply of unsolicited information, some of which may be relevant (Butcher, 1998), a large amount and high rate of information act like noise when they reach overload (Klapp, 1986), the point where there is so much information that it is no longer possible to use it (Feather, 1998, p. 118). The simplest definition is maybe: "receiving too much information" (Eppler & Mengis, 2004, p. 324).

The increased use of information technology have increased the amount of information available. One of the main challenges with this added information is e-mail overload (Whittaker & Sidner, 1997). Newer literature states the same (Bawden & Robinsin, 2008).

The literature mentions seven reasons why managers obtain too much information:

- they collect information to indicate a commitment to rationalism and competence which they believe improves decision-making;
- they receive enormous accounts of unsolicited information;
- they seek more information to check out the information already acquired;
- they need to be able to demonstrate justification of decisions;
- they collect information just in case it might be useful;
- they play safe and gather all information possible;



- They like to use the information as a currency - not to be left behind colleagues (Butcher, 1998, pp. 53-54).

Recent studies show three different challenges with too much information:

- 1) Limited information search and retrieval strategies. The first a person receives is accepted as good enough. This can lead to a situation in which a person will miss out on important information
- 2) Arbitrary information analysis and organization. For example by just read it briefly or only look at highlights. This can lead misinterpretation of the information.
- 3) If too much information is acquired it might be that people just do not manage to relate to it. They leave it to a later point in time to look into it. This can lead to delaying important things. This will also lead to a suboptimal decision process (Jacobsen & Thorsvik, 2007, p. 257; Eppler & Mengis, 2004, p. 333).

### **Opportunistic behavior**

Opportunistic behavior is defined as purposely act in a way that is positive for your own needs and interest without caring about how this affect other people's needs and interests (Kaufmann & Kaufmann, 2007, p. 359). This will affect the communication in such a way that people purposely will hide information that would be relevant for others in order to take advantage of the situation (Jacobsen & Thorsvik, 2007, p. 258). The term hide will here have a broad meaning. In addition to simply hide information, it also includes tasks like giving misleading information.

Problems with free communication between managers and workers was described as a problem already during the Hawthorne studies (Mayo, 1949). He states, "It is beyond reasonable doubt the outstanding deficit that civilization is facing today (pp. 20-1). "Secrecy is a pervasive feature of managerial behavior and is the source of regular complaints from disempowered workers" (Haslam, 2004, p. 89). It has to be stated that this opportunistic behavior does not affect only hiding of information from all other people. This same behavior can happen also between groups. Shinobu Suzuki studied a workforce consisting of Japanese and American workers (Suzuki, 1998). This study confirmed that the workers would communicate more with members from their national in-group that with members of an out-group.

## Other communication challenges

The list of communication challenges defined by Jacobsen and Thorsvik is not exhaustive. One other type of challenges are psychological challenges (Grenness, 1999; Kaufmann & Kaufmann, 2007). This means that the sender and receiver is not aligned and not able to understand each other properly. The psychological barriers affect the other challenges mentioned above. One example is feelings. If a person who usually not communicate in English suddenly have to communicate in this foreign language it might cause stress. The person will feel uncomfortable and not be able to decode the message properly.

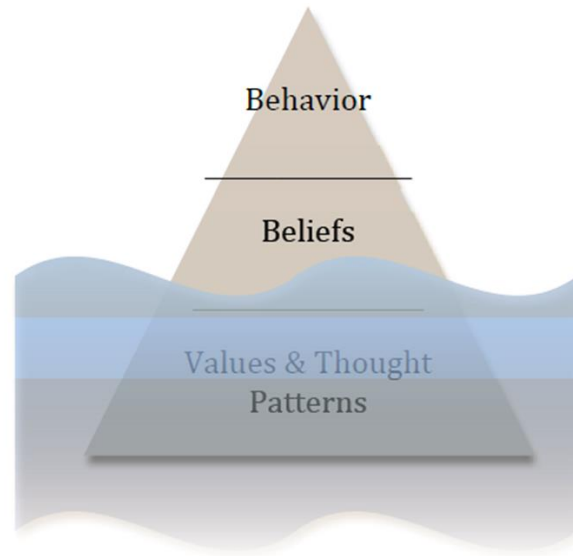
### 2.1.4 Summary

Communication might seem like a simple process, but; as described above, there are a number of factors that affects the communication and make it more difficult. In these situations, there will have a gap between what the sender tried to inform the receiver about and how the receiver actually understood the message.

## 2.2 Culture

In order to get a proper definition of the term culture we should probably look into anthropology. Even here, this is said to be one of the most complex terms to define (Hylland Eriksen, 2006, p. 34). However, some definitions are more common than others are. The one that is maybe the most common is Tylors definition from 1871: “That complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society” (Hylland Eriksen, 2006, p. 35). What is important here is the mention of *a member of society*. There are a huge number of different societies in the world, which implies that there are a huge number of different cultures. Different cultures will have differences in their belief, art, morals, law, custom and any other capabilities.

One common way to describe different levels of culture is the iceberg model (Hall E. T., 1976; Messner W. , 2009, p. 2; Fife, 2011, p. 67).



*Figure 2 the iceberg model of culture (Hall, 1976)*

This model shows some important attributes or aspects of culture. The most important is maybe that some are partly hidden and not something that easily can be observed. Values or assumptions is something that is within the individuals in this particular group/culture.

Neither people who are part of that particular culture nor people who are not part of it can see this. Nevertheless, the people who are part of the same culture they will share the same values and assumptions and hence interpret it in a common way. The fact that people can belong to more than one culture at the same time is also important. I am a Norwegian, but also an IT-professional. Sometimes there might be conflicts between the different groups related to expectation of my behavior.

It can also be said in this way:

“Laws, customs, rituals, gestures, ways of dressing, food and drink are methods of greeting, and saying goodbye... These are all part of culture, but they are just the tip of the cultural iceberg. The most important elements of culture are those that lie beneath the surface of everyday interaction. We call these value orientations. Value orientations are preferences for certain outcomes over others” (Katan, 1999, p. 29).

For example when I take part in the immersion of the Hindu God Sri Ganesh, I can observe the lowering of that a statue representing a God into the sea. When I see a person on a cross on Good Friday, acting as Jesus Christ, I can see his pain. If I had helped lower the Ganesh statue into the sea or hang on the cross myself, I would have behaved like people around me.

However as I am neither a Hindu nor a Catholic it is difficult for me to understand what this means for the crowd around me. As I have not learned to share the same values of them, I do not share the same beliefs.

## **2.3 Communication across different cultures**

When a receiver decodes a message, he will have certain skills for decoding the message. This will include a set of learned responses to signs; certain beliefs and values, some lightly held, some, which he is prepared to defend stubbornly against any change (Schram & Roberts, 1974, p. 32). Values are broad tendencies to prefer certain states of affairs to other. Below how these differences affect the intercultural communication is discussed.

### **2.3.1 Differences in behavior**

One major difference is the differences when it comes to touching (Thomas & Inkson, 2009, pp. 97-). One example is a handshake, which in many cultures denotes a friendly relationship. In some countries, like India, men and women generally do not shake hands (Messner W. , 2009, p. 121). Men in India will usually greet you with a long handshake. Just leave your hands in their hand and wait until they release it. If you are to meet a woman, do not extend your hand to her unless she clearly offers it to you<sup>3</sup>.

Another difference is the difference in distance. People in different cultures are acting differently when it comes to how close to each other they stand when they communicate. For example, in casual conversation, Greeks will stand closer than Americans, who stand closer than Norwegians do, and so on.

### **2.3.2 Difference in speaking**

When it comes to differences in speaking, there are a number of differences between different cultures. The most common difference is the differences in use of words. While in English yes usually means yes and no usually means no, there are 20 different ways that Japanese can express no by saying yes (Fife, 2011, p. 62). Another difference is the situation in which

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<sup>3</sup> This I have experienced a number of times myself. As most of my female Indian colleagues feel that they know me by now, they very easily offer a handshake. It is however always quite gentle. On the other hand, I have seen Norwegians trying to hug an Indian colleague. That might work when they are both in Norway, but when in India this looks quite strange and the Indian will easily feel quite puzzled about it.

some people mix their language with English. Examples are Taglish at the Philippines (Dalton & Keeling, 2011, p. 452) and Hindglish in India (Messner W. , 2009, p. 115). When I first came to India, I did not realize that they use the words bike and cycle different from what I am used to. A bike in India is always a motorbike while a cycle is a pedal cycle. I thought that both bike and cycle is used to describe a pedal cycle and initially we had some misunderstandings about this.

Challenges with different meanings of words typically occur when at least one of the speakers uses English as a second language (Kreps, 1986). These people cannot be expected to understand the language the same way as native English speakers can do. Some techniques like speaking slowly, using visual signs, check for understanding,<sup>4</sup> and so on are useful in these cases.

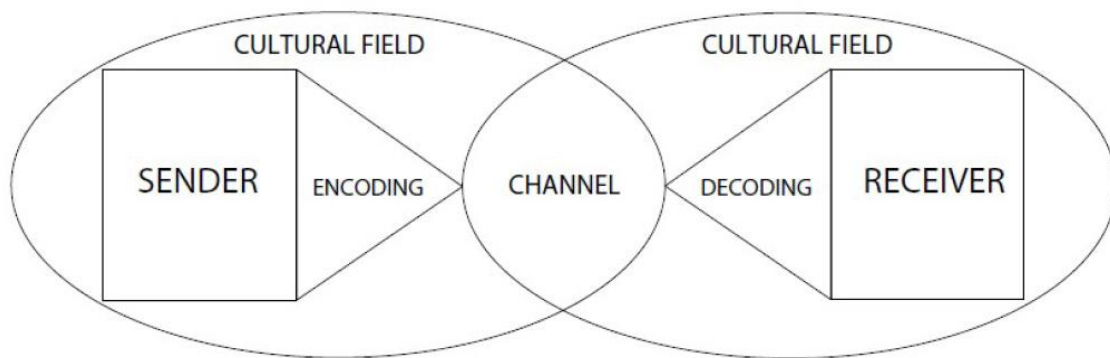
### **2.3.3 High context and low context cultures**

One of the most important differences in communication styles in different cultures is what is defined as high context and low context (Hall E. T., 1959). In this book, the American anthropologist Edward T. Hall explores how people communicate without using words (non-verbal communication). In low context communication, the explicit communicated message contains most of the information and the decoding is often quite simple. In high context communication at the other hand, an important part of the message is communicated only through the physical and social context (Lundheim, 2010, p. 90). The communication style in East-Asian cultures is generally more high context than in Europe and Northern America. This certainly creates some challenges when people from context cultures communicate: “In new and unknown situations, in which one is likely to be most dependent on reading nonverbal cues, the chances of one’s being correct decreases as cultural distances increase” (Hall E. T., 1976, p. 76).

In high context cultures the coding and decoding modules in the Shannon-Weaver model is preprogrammed with a pattern of meaning that minimizes the need for detailed, explicit communication (Lundheim, 2010, p. 92). This works very well as long as all parties have the same cultural background. If that is not the case, we have a situation as describe in the figure below.

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<sup>4</sup> A list of second-language strategies is found in (Adler & Kiggundu, 1983)



*Figure 3 Communication across cultures (Thomas & Inkson, 2009, p. 88)*

The figure shows that sender and receiver have different cultural fields. This threatens the communication, because they might not have a common way to encode and decode the message.

Cultural differences threaten the communication because they reduce the available codes and conventions that are shared by sender and receiver. Different cultural fields act as noise in the communication. Walter Lippmann said it quite well in the following way:

“For the most part we do not first see, and then define; we define first and then see. In the great blooming, buzzing confusion of the outer world, we pick out what our culture has already defined for us, and we tend to perceive that which we have picked out in the form stereotyped for us by our culture” (Lippmann, 1922, p. 81).

One typical example of a high context signal is the Indian wiggle (Messner W. , 2008, p. 116). An Indian that constantly shakes his/hers head from side to side tells you that he/she understands what you say/listen to you/agrees/are happy with your suggestion or something like that... It is not, as many Europeans initially believe, a signal of disagreement.

### **2.3.4 Differences in writing**

I assume that the differences in communication style in different cultures mentioned above are applicable regardless of communication media. However, I would like to stress the importance of differences when it comes to writing particularly. As stated above, written communication is less efficient when it comes to handle rich information than verbal channels (Daft & Lengel, 1986). Because of different ways of writing, use of written channels for cross-cultural communication might lead to extensive misunderstandings. When less rich

(asynchronous) communication channels are used, these misunderstandings will often take longer time to resolve than with face-to-face oral communication.

There are a number of examples on how differences in writing create problems described in (Messner W. , 2009, pp. 115-135). All these examples are related to the use of e-mails.

E-mail have changed the way people communicate today. Due to this, it is important that people in different cultures understand the e-mails similarly (Bawden & Robinsin, 2008). The example below shows one such situation where communication in e-mail is misunderstood.

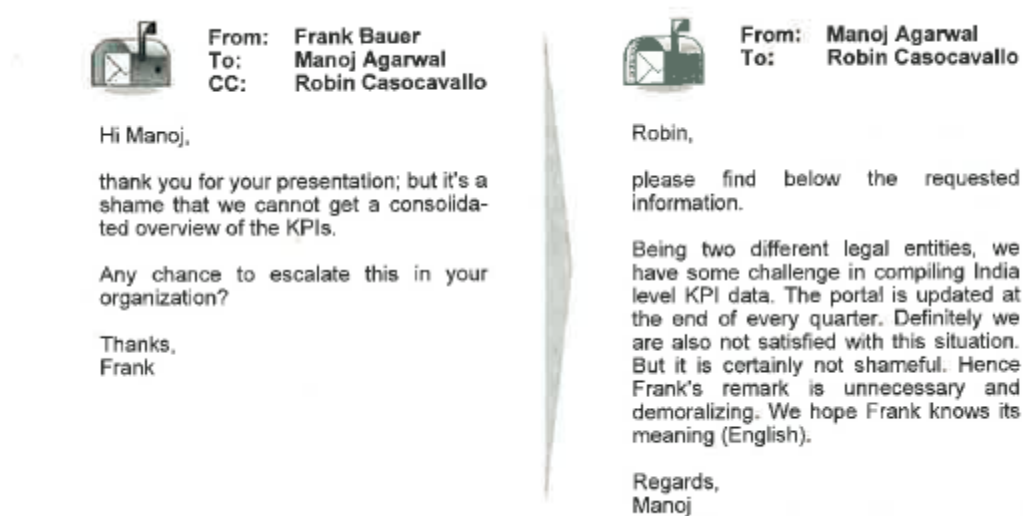


Figure 4 Misunderstandings in e-mail (Messner, W. 2009, p. 117)

Here the main problem is the phrase it is a shame that Frank used. In international English, this means nothing but it is a pity. His Indian colleague feels somewhat guilty about this shortcoming, spots the word shame and gets a painful humiliation sensation.

Another difference is the way written documents are articulated. It is my experience that Indians (and Asians in general) usually use more words than Europeans, who are more direct, or rather blunt, in their way of writing. Particularly when it comes to telling bad news, information in the e-mail might be hidden by saying things like: "The project team has recently become very busy", "Some (!) parts of the project are really successful and ahead of or on time" (Messner W. , 2009, p. 128). When you get an e-mail like this, you have to be on your alert and your intercultural skill. This will most likely mean that the status of the project is much worse than what it look like.

### **2.3.5 How differences in culture have implications for feedback**

As stated earlier in this thesis, the way feedback should be given depends on culture. Words have different meanings in different cultures. Like the example above with the use of the word shame, using the word stupid is very offending at the Philippines<sup>5</sup>. In Norway at the other hand this is seen more as a correction than something that is offending. The same is the issue also in India. It is said that “Negative feedback, needless to say, has nothing in common with telling people what they want to hear and for Indians, therefore, is practically akin to torture” (Stori, 2007, p. 53). When Westerners give feedback to Indians, they should be very careful about the way it is done. Ideally, it should be written in a nicer way than it would have been done if the receiver were also a Western (Messner W. , 2009, pp. 134-135).

### **2.3.6 How do the differences in cultures and location have implications for the communication?**

I have now defined both the terms communication and culture. A number of factors affects the communication. Culture is one of them. Distance is another. It is obvious that if people are in different locations and even in different countries then face-to-face communication is more difficult. This will restrict an organizations possibility to use rich media channels. When people not can see each other, they cannot speak face-to-face. New technology like video conference and chat-functions to some extend help on this (Elmholdt, 2006). It is however not feasible for anyone to spend the whole day in a video conference room. The possibility just to turn around to the colleague sitting next to you disappears if that colleague is thousands of miles away.

A recent Norwegian study states that, “Time zones and different working hours between the mother country Norway and nations on the other side of the world represent a major challenge” (Sintef, 2012). This article further state: “You have to be flexible when scheduling working hours for the teams involved so that they can communicate and work together”. An Australian study states the same (Hanisch & Corbitt, 2004). This is a case study in where an international software company based in New Zealand should develop software for a large rail company located in the UK. The study showed that when the challenges became too intense (mainly due to miscommunication / misinterpretation, and invalid requirements), new ways of communicating, or improved use of the current communication mode, were introduced to

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<sup>5</sup> Based on input I got from friends at the Philippines while doing interviews there



meet the communication challenge (Hanisch & Corbitt, 2004). The project started with most of the communication through e-mail. This changed to e-mail and phone and later video conferencing were introduced. During the user acceptance test period a number of developers from New Zealand were located in UK.

Both these studies points at the same challenges. When people are in different locations, some measures have to be taken to ensure efficient communication. More formal communication might to some extend can help in this situation. Is that enough? What is lost if people not can have their informal chats in their own language at the canteen, coffee bar or other places? Before I moved to India, I was told that English is the office language in India so there would be no problem to be understood. That turned out to be wrong. People spoke Hindi (or even Marathi) to each other. In offices at the Philippines, I have seen signs in meeting rooms saying: English only in this room. At the other hand, I have also seen traditional Filipino birthday celebrations in the offices, with people speaking probably in Tagalong. For a foreigner who are not used to such celebrations at the office this was surely quite strange to see (and hear!).

People communicating in their own language influences the informal communication in the project. It also exclude those people who not speak this language.

## **2.4 Offshore middleman**

In offshore projects there will always be (at least) two different cliques that works in different geographical locations and are unable to communicate face-to-face in their daily work. One way to ease the communication between the two groups is to use a liaison, which “is an individual who interpersonally connects two or more cliques within a system” (Rogers & Agarwala-Rogers, 1976, p. 135). In offshoring projects this person is often named an offshore middleman (Mahnke, Wareham, & Bjorn-Andersen, 2008). They define this person as “someone who can facilitate the exchange of expertise across two groups who hold different goals, values and technical languages” (Mahnke, Wareham, & Bjorn-Andersen, 2008, p. 18). A middleman will act as a boundary object, as someone who can maintain “a common identity across sites” (Bowker & Star, 1999, p. 297). An important part of this activity will be to make sure that the message communicated is understood equal at all sites.

One key task for the offshore middleman is to develop inter-firm social and intellectual capital to create interfaces allowing for inter-firm knowledge identification, knowledge sharing, and knowledge-combination across company and cultural boundaries. This shows an extension of the definition of a liaison. An offshore intermediary work across companies and cultures. In projects run by Indian IT-companies in Norway today, we quite often see a number of Indians working in Norway (often called on-site) for some time. They act as such middlemen. By being in Norway, they learn about the Norwegian culture and the communication where they work. This they are supposed to bring back home to ease the communication when they work from India. Likewise, it is common for Western companies to have people in foreign countries in order to help bridge the communication in projects executed there. Not everyone who work in a different country are middlemen. One example of this is people who are in a country just to take part in knowledge sharing activities. In this scenario, they will usually not perform any activities that make them a middleman.

The actual role of a middleman depends on the setup of the project. In a customer/vendor setting the middleman will most often represent the customer and work from the vendor location. A person who come from the vendor and work at the customer's premises might act as an onshore/on-shore middleman. This person will quite often also act as a project manager for the vendor team, which work at the customer location (on-shore project manager).

In cases where there is no customer/vendor situation the role of the middleman is slightly different. Coordination between companies will not be part of the tasks in this situation. Some companies still uses the terms offshore/onshore, even if everybody work for the same company<sup>6</sup>. Other companies talk about headquarter and global R&D department (Sødeberg, 2012).

## **2.5 Technology for communication**

New technology continuously help to improve the communication. Just think about how the telegraph system outpaced horses (America's Library, 2014), and how e-mail now have almost nullified the use of traditional letters. There has been a continuous evolution in this area and it is maybe difficult to point at specific technologies as being more revolutionary than others are. Some researcher's claims that new technology have made the old

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<sup>6</sup> This is based on input from some of my informants

communication model described above not to be complete anymore (McAfee, 2006). McAfee claims that in addition to the traditional channels we now also have platforms, which are “in a way the opposite of channels in that their content is generated, or at least approved, by a small group but then is widely visible – production is centralized and commonality is high” (McAfee, 2006, p. 22).

The evolution of technology does not happen uniformly across the globe. Even if mobile phones are now common across the world, the usage is different in different places. At the Philippines, it is much cheaper to send SMS than to call. This has affected the communication in the country in such a way that for a long time, the Philippines is known as the text capital of the world (Arnold, 2000). In Norway, it is common to use the mobile phone to surf on Internet and to send e-mail. In a recent survey 42% of the respondents answered that the use e-mail at the phone daily up (from 16% in 2011) (Norwegian Post and Telecommunications Authority, 2013). The number of people who uses the phone to send direct messages (Imessage, WhatsApp<sup>7</sup> ++ ) daily has also increased from only 3% in 2011 to 23% in 2013. The same trend is applicable also at the rest of the world (Aruba Networks, 2014). New technology have changed the way we work. Today it is almost just as common to work from home before 9 am or after 6 pm as it is to work within the normal office hours.

How does this affect the communication? “Mobile communicating radically increases the speed of interaction by essentially eliminating the time lag between interactions” (Saylor, 2013). The fact that people now read and answers e-mail on their phone mean that this communication channel is now in some way becoming more of a synchronous than an asynchronous communication channel. This mobile technology reduce distance obstacles in the communication, as it is now possible to communicate with people regardless of their location.

## **2.6 Globalization and communication**

The structuration theory (Giddens, 1984) explains the correlation between agents’ activities and social structures in production, reproduction and regulation of social systems. Human agency, in Giddens formulation, is the “capacity to make a difference” (Giddens, 1984, p. 14). Agency is intimately connected with power. Power involves the exploitation of resources.

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<sup>7</sup> WhatsApp is a proprietary cross-platform instant message platform for smart phones. It was acquired by Facebook at the 19th of February of 2014 (Facebook, 2014)

“Resources (focused by signification and legitimation) are structured properties of social systems, drawn on and reproduced by knowledgeable agents in the course of interaction” (Giddens, 1984, p. 15). Giddens defines structure as “rules and resources recursively implicated in social reproduction” (Giddens, 1984, pp. xxx1-). Further Giddens recasts the two independent sets of phenomena (dualism) of structure and agency as a ‘duality’ two concepts that are dependent upon each other and recursively related.

Giddens is concerned with the modern society and how new technology affect the way people act. He talks about expert systems, which are not present in time and space, but something the actors have to trust (Giddens, 1990). Electronic information infrastructures can be understood as an example of an expert system. Most of us do not know how new technology transmits what we communicate. It helps us in the communication, and this is good enough for most of us.

A well-known researcher who builds on Giddens’ work is Wanda Orlikowski. She says, “Technology [...] is neither an independent, external force completely outside of our influence, nor a fully malleable resource that can be thoroughly controlled or bent to our will” (Orlikowski & Iacono, 2001). This means that the way human people (agents) uses the IT-tools will create norms (structures) for further use (Orlikowski, 2000). By creating norms for how to use technology, the usage is developed.

E-mail is an example of a technology that structures the communication in a particular way. When you send an e-mail, there are limited ways to signal the message. You can indicate that some recipients are less important than others are by using the cc-field, but except from that, communicating a message through e-mail is a binary process. Either you include the recipient or you do not include her. This in comparison to face-to-face meetings. In a meeting you can use non-verbal signals in addition to what you say, like staring at someone, kick them at their leg, and others. The e-mail technology, developed to ease the communication, also affects the way we communicate in ways we cannot genuinely control. This is one example on how technology is not purely outside our control or something that we can shape the way we would like to (Orlikowski & Iacono, 2001).

One example of this is the use of e-mails. Initially only people in front of a computer could send e-mails. With improved technology, like smartphones it is now possible to send e-mails

from everywhere. This has drastically reduced the barrier for when to send an e-mail and what the message includes.

Giddens theory also explains how people interprets messages. This is shown in the figure below.

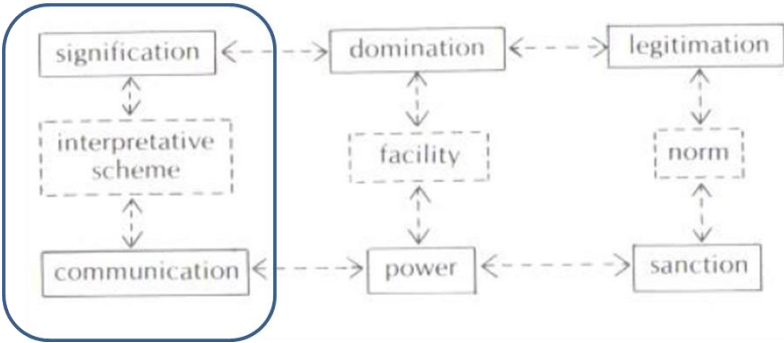


Figure 5 Based on Giddens (Giddens, 1984, p. 29)

This figure shows the dimensions of the duality of structure. For this thesis, the most important part is the signification structure, which directly affects communication. The signification structure consists of common rules, concepts and theories that are supposed to give activities meaning. In the day-to-day interaction human agents builds on interpretative schemes to communicate understanding and meaning. These schemes are cognitive, meaning that each actor interprets what is being said and done. The use of such schemes depends on and builds on the signification-structure, but at the same time also reproduces the structuration over time (Giddens, 1984). This model is applicable to the communication model presented in Figure 1. That model explains the interpretation (decoding) of the message. The interpretation will depend on the culture of the different actors, as shown in Figure 3. By combining these three models, we see how the structuration theory corresponds with how different cultures affect the communication.

Giddens distinguishes between the cohesive effects of social interactions, which take place when actors are physically present and wider systemic effects of interactions across distance. He states that, “The reflexive monitoring of action in situations of co-presence is the main anchoring of social integration” (Giddens, 1984, pp. 191-). With todays improved technology it is possible to interact face-to-face with colleagues sitting at the adjacent office as well as with people at the other side of the world. This helps replicate social practice on a wider scale than the face-to-face interactions permit (Rose & Scheepers, 2001). Time space distancing

involves the “stretching of social systems across time-space, on the basis of mechanisms of social and system integration” (Giddens, 1984, p. 377).

This show usage of the structuration theory to discuss how differences in culture affect communication. People in different cultures (or different social systems as Giddens say) have different structures. This affect the codes they have to decode a message. At the same time, communication across time and space can help to align the modes (make them more similar).

Globalization is the process that “encompasses the causes, course, and consequences of a transnational and transcultural integration and non-human activities” (Al-Rodhan, 2006). Globalized society offers a complex web of forces and factors that bring people, cultures, markets, beliefs and practices into increasingly greater proximity to one another (Sorrells, 2012). This also mean that actors might get confused about what culture they really belong to, or even feel that they belong to more than one culture at the same time (D'Mello & Sahay, 2007).

With the improved technology, it is common to say that the world have become smaller. Communication is not anymore something that you do just with your closest neighbours. With the increased mobility of people caused by the globalization it is not even sure, you share the same mother tongue as your closest neighbour. The structures described by Giddens changes more rapidly than before, and being changed by agents who might even not know each other. They might not even know that they change the structure together. The globalization have changed the way people communicate, the usage of tools for communication, and even with whom they communicate.

# 3 Methodology

This thesis is part of an experienced based master program. This compared to a more traditional scientific master. One important difference is that all students who do an experienced based master should have at least two years of working experience. As students, we ought to use our work experience in the master thesis.

It is stated that: “the master thesis should be an independent research work, preferably based on an empiric examination, and ideally based on a problem description and with data collected from your own workplace. The problem description should be relevant for those subject areas which are core parts of the master program” (University of Oslo, 2013). The thesis is part of what the University of Oslo consider as a short time master. Fulltime students are expected to use one semester, compared with two semester for a long time master. As a part-time student, I am expected to use two semesters.

These guidelines have been important in my selection of methodology, described in more detail below.

## 3.1 Research design & strategy

While writing a master thesis there is a number of constraints and dilemmas to overcome (Everett & Furuseth, 2012, s. 129). The first main constraint is time. I did this as a part-time study, which meant that I also had a full-time job during the work with the thesis. Economy was another constraint. There are no external sponsors for the thesis work. This limits the number of travels and interviews I could conduct at different locations.

Everett and Furuseth mention a number of different motives for creating a thesis. These are; overrule previous research, add to previous research, repeat previous research, research of one specific case (case study) and to create a thesis as part of a larger research program. They accept that there can be more types also and that the suggested types are not mutual exclusive (Everett & Furuseth, 2012, ss. 129-). By focusing purely on communication challenges in the projects, my ambition is to add to previous research, which look into challenges in global IT-projects with a more generic perspective.

### 3.1.1 Research design

According to Alan Bryman, there are five different ways that the social science research can be designed (Bryman, 2012, p. 76). These ways are experimental, cross-sectional, longitudinal, case study and comparative.

During some initial discussions with my supervisor and other staff at the University of Oslo, we went through the different options for this thesis. The recommendation they gave me was to do either an intrinsic or instrumental case study in which I focused quite detailed about one or a few number of cases (Silverman, 2010, p. 139). An intrinsic case study is a study where the particular case is of interest in all its particularity and ordinariness. This usually does not include any attempt to generalize beyond the single case. In an instrumental case study, the purpose is to provide insight into an issue or to revise a generalization.

For a number of reasons, I did not follow this recommendation. One main reason is my own experience in the IT-business. For a number of years I have worked with IT-projects across different continents and cultures. Particularly during my time in India, I worked in an environment where I communicated with colleagues at almost all continents. During that period, I took many notes and discussed my experiences with a number of people. I also wrote a blog where I shared many of my experiences (Eskelund, 2011). My research question - **How does workers in global IT-projects mitigate communication challenges**, is in itself quite explorative. As a student, I wanted to use the opportunity to see how other organizations handle the same kind of challenges as what I experienced. Due to this, I decided using a research method of a more exploratory characteristic.

It is quite common to use an exploratory approach in IT-research. In a study about boundary spanning and creolization, the main criteria's for selection of informants were that they a) should be involved in offshore services provision and b) there should be ongoing interaction between the client site and the supplier (Abbott, Zheng, Du, & Willcocks, 2013). In my exploratory study, the unit of analysis is IT-professionals working in co-located projects.

According to the guidelines for the thesis, data should ideally have been collected from my own organization. Capgemini has been studied before, which could have acted as a good platform for my research (Thane Lange, 2011; Nordlund, 2012). I resigned from Capgemini in November 2013. It would have been almost impossible for me to do research in a company that I had just left. It is often easier to talk more open to strangers than to neighbors and friends, or in this case, a colleague (Wadel, 1991, p. 134). Due to this, I decided not to choose



Capgemini as the subject for study. When I had already decided that I could not do a case study in this particular company it also became easier for me to look at different methods than a pure case study.

Based on what is said above I would say that my research strategy is more of a cross-sectional type. Cross-sectional design entails

“the collection of data on more than one case (usually quite a lot more than one) and at a single point of time in order to collect a body of quantitative or quantifiable data in connection with two or more variables (usually many more than two), which are then examined to detect patterns of association” (Bryman, 2012, p. 58).

This definition associates cross-sectional design with quantitative methods. However, it should also be noted that qualitative research often entails a form of cross-sectional design. A fairly typical form of such research is when the researcher employ unstructured interviewing or semi-structured interviewing with a number of people” (Bryman, 2012, p. 62). That corresponds quite well with the research method in for this thesis.

Cross-sectional studies have for a sustainable period been the predominant form of research in information systems (Orlikowski & Baroudi, 1991). This technique allow me as a researcher to examine different subjects and how the differences at the time of data collection may have an impact on the outcome. In my case, this meant to examine how people in different companies in different cultures handled communication challenges.

### **3.1.2 Qualitative versus quantitative methodology**

When it comes to decide the research strategy there are two methods to choose from; qualitative and quantitative research (Ringdal, 2012, p. 91). The main topic of my thesis is obstacles in communication. This can be described as exploring people’s behaviour, which favours a qualitative research method (Silverman, 2010, p. 210). Communication challenges are quite difficult to measure in numbers. The same can also be said about measurement of culture (Martin, 2002). What is seen as a challenge differ in different cultures, hence qualitative research is best suited (Hofstede, Hofstede, & Minkov, 2010; Thane Lange, 2011). One important difference between qualitative and quantitative research is how close the researcher get to the people that are being studied (Ringdal, 2012). In quantitative research, the researcher is more distant and the number of objects are more. The opposite is the case in

qualitative research. In a qualitative research strategy, the aim is to find the meaning and reasoning of some behaviour. This was exactly the case for this study; to find out what communication challenges that exists and what is done to mitigate those. In order to do this it was imperative to talk to people and to get some insight into their understanding of the actual situation. In qualitative research, the procedure for choosing appropriate candidates is not as strict as in quantitative research (Fangen, 2004, s. 51). As a researcher, you are freer to talk to people who seem to have relevant input for your study. During the data collection phase, it happened that someone suggested me to contact people other than those I initially planned to interview. This gave me a broader range of informants and more research data.

### **3.1.3 Design of interview guide**

An interview guide is “a manuscript that structures the interview more or less strict. The guide will either have some generic themes to discuss or be a more detailed sequence of questions to be followed” (Kvale & Brinkmann, 2010, p. 143).

Many books describe the communication process in a quite similar way (Schram & Roberts, 1974; Rogers & Agarwala-Rogers, 1976; Grenness, 1999; Kaufmann & Kaufmann, 2007). By using these books as a template, I got a good start to create the interview guide. To a huge extent, I could follow the structure in these books when creating the interview guide.

During the interviews, I allowed the informants to drift away from the guide when that seemed natural to do. When interviewing in a cross-cultural setting, unstructured interviews often work quite well (Fontana & Frey, 1994). Unstructured interviews are used in an attempt to understand the complex behavior of members of society without imposing any priori categorization that may limit the field of inquiry. People in different situations will answers questions differently. My Norwegian informants mostly answered quite direct on the questions. Some Indian informants elaborated more in their answers. Drifting away from the guide made it possible for everyone to answer in a way that seemed to suit him or her.

Please see Appendix 1 for the interview guide.

## **3.2 Selection of informants**

In order to select the actual candidates for interviews there were a number of decisions to make. The choice of number of cases and the selection of each case provides major challenges in case studies (Eisenhardt, 1989). Even if this is not a purely case study, the same challenge is applicable. My informants are from different countries, but still share some of the same attributes. All of them work in global IT-projects. They work with people they not can talk to face-to-face. They regularly communicate through electronic channels. Due to this, I found it relevant to select informants from different countries. The fact that they came from different countries seems more of a strength than a weakness in such a case. As other exploratory studies also uses exhaustive criteria's in their selection of informants, I decided to go by that strategy.

In the period of November and December 2013, I traveled to India and the Philippines to conduct interviews. These two countries were not selected by random. India is ranked first in almost all global rankings of offshoring locations. The Philippines is also ranked high and currently climb in the rankings (SourcingLine, 2013; Tholons, 2013; Tejaswi, 2013). Over the last six years, I have travelled regularly to both countries, which help me in understanding accents and non-verbal signals. By choosing countries that are heavily involved in offshoring, there were also an extensive number of interview candidates.

The ambition of both these trips was to interview as many relevant people as possible. In order to identify right people to interview a number of channels were used. In India I used a number of my friends there as gatekeepers, as someone who could help me to get access to other people (Fangen, 2004, s. 63). In some instances my gatekeeper were actually employed by the organization in which I did my research. In other situations they were people I knew from before and who could put me in touch with relevant people to interview.

### **3.2.1 Doing research in different countries**

Doing interviews in a different culture than your own require some extra skills and preparations. "An interviewer in a different culture have to spend time to learn the new culture to know and to understand some of the many verbal and non-verbal factors that might case that the interviewer get lost" (Kvale & Brinkmann, 2010, p. 156).

Before and during my stay in India I read a lot about Indian culture, sport, religion, society and so on. Through informal conversations with friends, I learned a lot about even topic that

would be considered as sensitive (Lee R. M., 1993). This experience help me a lot conducting interviews with people in other cultures, particularly in India. Other researches without the same experience described some frustrations in challenging interview situations (Thane Lange, 2011; Nordlund, 2012). By using my experience from the time I lived in India, I did not end up in the same frustrating situations.

### **3.3 Data collection**

All research requires data (Everett & Furuseth, 2012, s. 132). For any researcher it can be difficult to get exactly the data you want to have. Before writing about the data I collected, I describe what kind of data I ideally wanted. At the end of this section, I will describe why I did not managed to gain exactly the data I wanted.

The primary source for my data was interviews. Some data was at an early stage collected through a web-based survey. As I did not find this way of collecting data very fruitful, I quite early stopped using the survey. The main challenge with survey data was that the answers were not comprehensive. This made it quite difficult to get a precise meaning of the data analysis.

#### **3.3.1 What data would I ideally liked to have**

Studying communication challenges in international companies is something I have wanted to do for a long time. Even before I started to think about any specific method for a thesis, I had a desire to do this kind of research. Initially my desire was to do an in-depth research in three different companies based in three different countries. The plan was to study communication hierarchies in these particular companies. I wanted to try to find out if the challenges experienced by team-members in one country was the same as challenges experienced by team-members in the other country. Longer face-to-face interviews with a huge number of team-members was what I craved for initially. This sought for a huge number of data was probably due to my lack of understanding of what would be a reasonable number (Silverman, 2010, pp. 192-194). Because I did not manage to get approval to conduct such studies in three companies, I abolished this idea.

#### **3.3.2 The interviews**

Totally 34 interviews were conducted in the period from August to December 2013. Two interviews were conducted in February 2014. Forty-one people are interviewed. In two interviews, I had groups of two people each. In one interview, I interviewed three people as one group. Rest of the interviews are one-to-one interviews. I interviewed four people through Skype. In these interviews, I was in Norway. The informants were in India, Denmark and Switzerland respectively. I followed up some of the informants with more questions on e-mail after the interview. The table below shows the geographical distribution of informants

Home country	Location <sup>8</sup>	Number of informants
Norway	Norway	5
Norway	India	2
Norway	Philippines	1
Denmark	India	1
Germany	India	1
India	India	23
Philippines	Philippines	4
Sweden	Philippines	2
UK	India	1
Denmark	Denmark	1

*Table 1: List of interviews*

Ten people acted in executive roles. Fifteen are in the role of project manager. Sixteen people work at consultant/senior consultant level. Eight of the people acted more or less in a role as a middleman. Even more of the informants have acted in this kind of role before.

When collecting the data there is a language usage dilemma. I have two options. This was to use English in all interviews or to use Norwegian with Norwegian informants. The solution became to use Norwegian with Norwegians. This way neither the informant nor the interviewer have to use a second-language (Thomas & Inkson, 2009). It is my opinion that this made interviews with Norwegian informants easier.

Another question was the mode of the interviews. Ideally, I wanted to meet everyone face-to-face. The fact that I spoke to people in so many countries made this very difficult. The solution to this problem was to conduct computer-supported interviews (Kvale & Brinkmann,

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<sup>8</sup> Some of the informants works and acts in more than one country

2010, p. 160). Using Skype for interviews instead of face-to-face have both some advantage and disadvantages. The greatest advantage is that it save me for taking extra trips and it make the interview situation more flexible (Elmholdt, 2006, p. 79). This was particularly useful with one of the informants. He is located in Chennai in India. He had to postpone the interview on short notice. If I had travelled to Chennai, the interview would probably not have taken place at all. By doing it electronically, we just did it later. One disadvantage by using this mode of communication was that I was not able to see the non-verbal signals of the other person. Totally four people are interviewed through Skype.

The fact that most communication in global IT-projects happen through electronic communication makes it extra valuable for me to conduct some interviews this way. By doing this I put myself into the same position as the informants I interview. During one interview, I had some problems to hear the other person while in the other case this worked very well. I can only assume that the persons I talked with managed to hear me clearly. This assumption is because none of them complained about any technical issues. Conducting interviews through computer-supported media put me in a situation like the one my informants experience very day. Many of them communicate mostly through electronic channels.

There were a number of reasons for conducting some of the interviews as group interviews (Myers, 2013). The first and probably most important was that it took less time for the companies where I conducted my interviews. Instead of having me there for a longer time, I could finish my interviews faster. In two cases, it was the manager of the informants who suggested that I should speak with the informants two at a time. Another reason was to try to get the informants more comfortable in the interview situation. This I felt worked out quite successfully and the interview went from a simple question/answer session to something more like a discussion. It also gave me an opportunity to see how less senior people acted in presence of their manager. When using this method of interviewing in an Indian team it was quite clear who was the lead of the team. At the same time, it was very interesting to observe that everybody actually participated.

I conducted most of the interviews at the work place of the informants. When this was not possible, we did the interviews at a location close to the work place. This ensures that the informants are in an environment that feels safe and comfortable for them. Each interview lasted from around 30 to 60 minutes and were recorded. I did my best to ensure that the informants were comfortable during the interviews. One informant refused the usage of a

recorder. As he was also the manager of four other informants, the recorder was not used in those interviews. I mitigated this by taking notes. In the other interviews, I avoided taking notes and tried to make the conversation flow. As soon as possible after each interview, I made a summary of what was said.

### **3.3.3 Observations**

Most of the interviews are conducted at the work place of the informants. This give me an opportunity to look at the office premises. By doing this, I observe the seating arrangements and the communication tools the informants have available. Some places I was shown how the video conference equipment work. Usage of laptops with inbuilt cameras are shown and described. Some of the locations were better planned in terms of communication than others. I visited some quite new premises where interior designers are used to help improve the communication. Other premises are quite old and are not constructed in order to improve the communication.

Some offices have noise reduction walls, while others have areas that are more open. In a few of the premises where all consultants have access to web cameras. The seating arrangement for the offshore middleman and project managers are also different at the different locations. Some companies have her in the middle of the team. In other companies, she have a separate office.

### **3.3.4 Discrepancies between actual data and ideal data**

As stated above it was my intention to do this research in only a low number of preselected companies. Because of difficulties in getting approvals from some companies, I ended up with informants from a wider number of companies than planned. One advantage by this is that most of the informants did not knew each other. That way they could not influence each other to ensure they gave me the answers that the company wished for rather than their own answers. A disadvantage by this set of data is that it is impossible for me to compare differences between colleagues in the same company in different countries. This prevents me from using input from one colleague as source for interviews with other colleagues. With the data I have, it is not possible to say anything about whether or not colleagues in different countries have the same communication challenges and if the eventually handle them differently.

At the Philippines, I had some challenges to get as many informants as I wanted. I also ended up interviewing more foreigners at the Philippines than what I did in India. This happened mostly because I overestimated my gatekeepers at the Philippines. I should have planned better upfront and have more interview candidates ready before I went there.

Most of my informants are what I will consider as experienced workers (five + years of experience). Most of them also have significant experience in communicating with people from other cultures. Initially I wanted to talk to people at more different levels of the organizations. Since most of my informants have long work experience, the challenges and solutions they described were probably a bit different from what less experienced informants would have described. By also interviewing people with less experience, I would maybe have experienced more varied communication problems.

### **3.3.5 Coding and data analysis**

When analyzing the data I followed a bottom-up approach and I aimed for a greater number of data sources (Myers M. D., 2013, p. 166). Even if I did not use any field diary, I spent a lot of time thinking about and reviewing what the early informants told me. I use this information in later interviews so that I could test if more people gave me the same answers. Based on this it was possible to find a pattern in the information I got even during the interview phases.

The data analyze was done with an approach based on grounded theory (GT). Due to the limited format of my project, I have not been able to do a full version including repeated data collection and cyclical enquiry (Willig, 2008). Initial coding is the first step of a GT analysis. I worked close to the data, identifying themes within single interviews one by one, mostly using descriptive labels (Charmaz, 2006). The next step was focused coding, where I established and sorted my preliminary codes into larger conceptual collections of data, which made the analysis more focused on certain main themes found during the initial phase (Charmaz, 2006).

A common goal in GT is to have theoretical saturation in the end of the process of analysis, having enough information to appraise the developed categories to a well defined and worked through based on the collected data (Willig, 2008). Having new information will in this case add little to the developed systems of categories. Through thorough work with the data material, I discovered several connections between factors and phenomenon's in this study.



By conducting two trips for collecting data, I was able to collect data over two periods with some period between them. By doing the data collection this way, in two phases, I was able to notice repeating information. When the informants at the Philippines repeated what the informants in India said, I stopped inquire for more details in specific categories.

Research questions developed before analysis are often the subject for development and change as the analysis progresses (Willig, 2008). This was also the case in this study. From a broader starting point, the analysis could narrow down the questions to be more specific. By using the answers from the first informant as a base for my questions, I could change the focus slightly when I interviewed the remaining informants.

### **3.4 Trustworthiness, authenticity and transferability**

In quantitative research it is common to ask whether the data is valid and reliable (Silverman D. , 2010). Qualitative studies at the other hand “should be judged or evaluated according to different criteria from those used by quantitative researchers” (Bryman, 2012, p. 390). Using terms like reliable and valid is difficult for the legitimacy of the qualitative research (Thaagaard, 2003). She argues that as these terms was initially used in quantitative research they will have different meaning in qualitative research. Thaagaard recommends using the terms trustworthy, authenticity and transferability. In this section, I define these terms and how my qualitative research can be judged based on these terms.

#### **3.4.1 Trustworthiness**

Trustworthiness says something on whether or not the research are done in a confident way (Thaagaard, 2003). The researcher have to differentiate between the data that has been collected through the field research and his/hers own judgment of this information (Thaagaard, 2003). The researcher also have to state the relation to the informants and how experience in the field affects the data the researcher will manage to extract (Thaagaard, 2003).

As the interviews were conducted in a number of different countries, I had to consider the way I asked the questions. The same words might be interpreted in different ways in different locations. I ended up using the same interview guide, and just modified the questions slightly to the setting.

Because some interviews were done in Norwegian and some in English, I had to translate the answers from Norwegian informants. A weakness with this is that there might be wrong translations and that the Informants meanings have not been understood in a conform way.

### **3.4.2 Authenticity**

While trustworthiness is connected to the way of collecting data is authenticity is connected to the interpretation of the results (Thaagaard, 2003). Authenticity is about the quality of the interpretation and whether or not the result from this project is supported by other research (Thaagaard, 2003). The researcher critically have to evaluate his position according to the society in where he do the research (Thaagaard, 2003).

Doing research in global IT-companies was very much like doing research in my own professional community (Wadel, 1991). As an IT-professional myself it sometimes felt like speaking with my own colleagues. This even if I spoke with people from different countries. Still I felt there was a difference between doing interviews in India and at the Philippines. In India, I know some of the local language, the common outside work interests (cricket!). At the Philippines, this was more unknown to me. This might have affected the way I understood and interpreted the results of the interviews. By being an IT-professional, I can understand the specific business phrases my informants use. This helps me in my interpretation of the data.

The authenticity of data is strengthen if there are previous research that gives similar results (Thaagaard, 2003). As stated in section 1.1, there is already extensive research that indicates that communication is an important issue in global IT-projects. This strengthen the authenticity of some of my findings. What I struggled to find in previous research, is data about the mitigation of such challenges. Hence, my findings regarding ways to mitigate is probably less authentic.

### **3.4.3 Transferability**

Transferability is the question regarding if this research is usable also in different settings (Thaagaard, 2003). Transferability contains a reconceptualization by using the theoretical framework used in one project in a wider context (Thaagaard, 2003). The number of informants (40+) is quite high for a master thesis. Even if each informant might not have the most transferable input, so is the sum of input from all the informants usable in a generic

setting. The fact that informants are from a wide number of countries and have different positions strengthen this. If all of them had been from a more conform group it could have been more difficult to transfer the results from this thesis to a different setting. Many of the informants answered the same to most of the questions, even if they are from different countries. This also strengthen the transferability of this research.

### 3.5 Ethical issues

As a researcher, I am responsible for designing a project of, and utilizing methods of research with high reasonable and ethical quality. (Kvale & Brinkmann, 2010). Throughout the project, I was attentive to ethical considerations in the process of recruitment, performing interviews, transcription and analysis, and the verifying and reporting of data. Before starting the project, an application containing a project description and the method of data collection and handling in this study was sent to the Norwegian Social Science Data Services (NSD). This application was approved in September 2013 (ref 35339). With one of the companies where I did a number of interviews, I also signed a non-disclosure agreement. This agreement was based on a standard from the actual company. With other companies, I did not sign such an agreement, but when needed the people I interviews made sure that they have approval from their managers to participate in the study.

In addition to these formal approvals, I will look into four different ethical questions. These are voluntary participation, confidentiality, consequences for the participants and the role of the researcher (Kvale & Brinkmann, 2010, pp. 88-94).

In order to ensure *voluntary participation* I encouraged the informants to sign an observation letter (Appendix 2) where they stated that they have understood the purpose of my interviews and that they voluntary accepted to participate in the interviews. When giving information about the research I have to judge how much information I should give to each participant. I tried to make sure that they all have enough information to be able to answer the questions in a proper way. At the same time, it was important for me not to give too much information. This could have affected their interest in participating in the study and affect their answers. It was also a question about who should give the approval of participation. Should it come from managers or from the individual interview candidates? For me it was important that the acceptance to participate came from the individual participant. Another question is if such

approval forms would affect the participants' bias towards the research. Having to sign a form can scare the participants. It can make the interviews seem more formal than what they are supposed to be. It might affect them to think that this is something issued by the management. In addition to the more formal interviews, I also had a number of quite informal discussions with participants. In those cases I did not ask for any signed approval, I just asked them if it was ok that I use what we talked about in my thesis. Most of the informants were contacted directly by me and it is fair to assume that they then participated voluntarily. In some cases managers asked subordinates if they could participate. Most of them answered yes to this. It is a bit challenging to judge whether this is a voluntary participation. I do think that this was ok. See also the section below regarding confidentiality. In one case, a potential informant said that he was busy with a critical incident. The manager quickly accepted that and that person was not interviewed.

Ethical issues related to *confidentiality* can be divided in two areas (Kvale & Brinkmann, 2010, pp. 88-94). Firstly, I have to be anxious about confidentiality internally in the organization where I did my research. I made an effort to explain the informants that I did not report anything of what they said to anyone in the company. In one situation, a manager asked how the informants answered. I politely told him that I could not give any detailed feedback on that question.

The other area in which confidentiality must be balanced is in the presentation of the results. In this thesis, I do not use the names of any companies. The same is applicable also for individual informants. As much as possible I have also tried to limit usage of actual quotes in this thesis. Some quotes help to improve the explanation of the actual data. The Norwegian press have written a number of articles about projects delivered from India that have failed. Some reports seem to be quite sceptic to whether or not it is possible to succeed with such projects (Sintef, 2012). I am aware that if I write any quotes that can be interpreted as stating how difficult it is to deal with Indians (or other offshore countries) there is a risk that this will be picked up by the press (Blix, 2013). When writing the final report I try to balance the quotes so that I do not come into a situation where this thesis can be used by the sensation press<sup>9</sup>.

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<sup>9</sup> I have personally been in a situation one paragraph has been blown up as the main part of the article. In 1994, I wrote a mostly positive article about the computer systems used during the Olympics at Lillehammer. The

*Consequences for the participants* is an important ethical question. If they have any fear that their answers can be used against them in any way, they will surely be reluctant to answer in an honest way. This is particularly important when researching a sensitive topic. A sensitive topic can be any topic: “in which there are potential consequences or implications, either directly for the participants in the research or for the class or individuals represented by the research” (Lee R. M., 1993). The important point here is that it is not a question about if I as a researcher find the topic sensitive or not. It is a question of if the informant finds it sensitive. If that is the case, then special measures should be taken in order to protect the confidentiality of the individual participant. I assume that talking about problems (communication problems) can be uncomfortable for some people. Who would like to end up potentially saying anything negative about their boss? (Rogers & Agarwala-Rogers, 1976, p. 97). By making it clear for my informants that whatever they said it would be between the two of us I try to ensure that giving an interview to me would not have any (negative) consequence for the interview candidate at all.

### **3.6 My role as a researcher**

Conducting interviews as a researcher is a quite new experience for me. However, my interest for this topic is not new. In some way, it has been a privilege to do a research like this.

My experience as an IT-professional have an impact on the interview setting. The respect I got when I introduced myself as an experienced IT-professional is probably higher than what younger students would have got. There was one situation where I should interview a mid-level manager. The informant suggested that I should speak to the CEO of the company. Due to respect, I of course accepted this. I thought that it might be valuable to interview him too. What happened was that the CEO completely took control of the situation. The intended informant hardly said a single word. It turned out that the CEO have a lot of experience from a number of countries so the interview is still relevant. A younger student with less exposure to India would maybe not even have got this opportunity. It might also be that a less experienced person would have missed this opportunity and insisted to interview the intended candidate instead.

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informant told us that at an early stage the arranging committee did not have full control of the development, which I think is normal in any IT-project. This journalist highlighted this quite as the main part of the article.

When I sent e-mails to the informants, I mostly use an e-mail account from the University of Oslo. I use the expression 'master thesis', which in some places have made confusions. Some informants (particularly in India) have thought that I have been working with a PhD thesis. A friend of mine in India said that it is not common to use the word 'thesis' when you work with your master degree. You will then rather use the word 'master project'. Some people have also expected me to be younger than what I am. Probably mostly because in my e-mail I have introduced myself as a student.

The informants realized that I have quite lot of experience in the area and in many situations we could discuss as equals rather than just having them explaining and me listening. Some of them asked me about my opinion on what we discussed.

I also think that my experience have affected the way questions have been asked, and my interpretation of the answers. Many of the answers were not surprising to me, but more confirmed my previous experience. A number of times I have reflected on this and wondered if my experience maybe even too much have affected the way I have interpreted the answers. Have I had too much bias one way or the other and wanted the informants to answer in one particular way? I hope that I have managed to balance the difference between being a student and an IT-professional quite well.

As a researcher, I have to choose the appropriate theory as the foundation for this thesis. For me as an IT-professional and not a regular student this was a new experience. This is not what I do in my work. Some of the literature for this thesis was part of the curriculum at the mandatory subjects, which was part of the master-study (Berg, 2011; Fife, 2011; Groth, 2005; Jacobsen & Thorsvik, 2007). These books were a very good starting point in my search for appropriate literature. A number of other books, particularly about India and Indian culture were books that I have had for a number of years. The different articles were mostly all references from one or more of the main books. During the work with this thesis, I found a number of articles that I thought would be of interest. At the end, I ended up reading quite many articles that I never used. When looking back I could probably have been wiser in my selection of articles and saved time by not trying to dive as deep as I did in many of the topics.

# 4 Findings

The findings from my interviews are described in this chapter. All the content in this chapter is taken from the interviews, except where it is clearly defined as my own experience.

Limitations with the data collected is described where applicable (Silverman, 2010, p. 347).

The findings are discussed with relevant theory in the next chapter.

Almost all informants stated that it is important to adjust the communication to what culture the other person is from, not just to adjust it when you speak with someone from a different culture. This challenge is described in section 4.1. Other communication challenges mentioned by the informants are described in section 4.2, while the strategies they use to mitigate the challenges are described in section 4.3.

Where specific quotes are used, informants are mentioned by designation and number, and not by name. This is to protect the privacy of the informants. When referring to specific countries, I refer to how different informants have experienced specific communication situations with people from that country. I do not try to make any generalization regarding different cultures like for example Hofstede (Hofstede, Hofstede, & Minkov, 2010).

## 4.1 The communication were adjusted to the culture of the person the informant communicate with

Most of the informants works with people from more than one other culture. From their answers, it is clear that stereotypes still exists. One informant explain differences in communicating with Germans and Indians in this way:

About Germans: “When I speak with my German colleagues they tend to be more black and white and they are quite blunt”. About Indians: “There is a certain reluctance to deliver bad news or negative news”

(Executive 1)

About Indians, he said that it is important not to be too bossy. They will at some point just say what you want to hear. About Germans, he stated that he had to be ruder in the conversation.

He said that when an Indian colleague say yes about committing to a deadline he have to look at the body language to judge whether the yes means that the person will only try to do it or if it means that the person is certain to actually complete the task within the given deadline.

A Norwegian informant repeats some of the same:

“When we have (telephone) meetings or are physical present we try to never challenge them to give answers in the meetings. We always give them a chance to go back and check”

(Project Manager 2)

What she states here is that in meetings they try not to be too presumptuous with their Indian counterparts. By allowing the Indian counterpart to go back and check, they give Indian project members an opportunity to get approval from their managers before giving feedback to the Norwegians. The Indian informants agreed that there is a higher reluctance to say no in their culture than what is the case in most European cultures. In addition to misunderstandings, it also implies a loss of time. This because the misunderstandings have to be clarified. Activities taking longer time than planned is hardly a communication problem in itself, but it is a side effect caused by communication problems.

The Filipinos have a view of Indians that deviated from the European view. When Filipinos compared Indians to other Asians, they claimed that Indians are more direct in their way of communicating. The most important to learn from this, from a European point of view, is that you should be careful using Asian as a generic term. There are many differences within Asia.

Most Indians also have clear perceptions about people from other cultures. They pointed out that when they work with other Asian countries they have to be very clear and distinct in the communication. One person said it this way:

“You have to tell them exactly what you want from them”

(Project Manager 9)

This corresponds with what the Filipino informants said, that Indians communicate more directly than other Asians do.



Both Indian and Filipino informants have some viewpoints about differences between Americans and Europeans (particularly British). They said that Americans are more informal. If something is misunderstood, it is just to explain again. Americans are also more open to informal talk, and willing to talk about themselves and non-work related activities. The British are more formal and in case of any problem escalations happens much more there than in US. Danish informants also commented on Indians use of small talk and that they do this more than what is common in Scandinavia. In general, there seems to be an agreement by most informants that in countries like the Philippines and India people are more interested in the wellbeing of their colleagues, while in Scandinavia we do not have the same connection to our colleagues. One other informant, (Consultant 16) also mentioned the same. She said that at offices at the Philippines people always have time for each other and that it is a somewhat relaxed atmosphere there. It is also quite common that colleagues spend time together outside office. Social relationship outside office might affect the communication. However, as this is a limited thesis, I choose not to discuss this further.

The number of interviews are obviously too few to give any clear conclusion in this area, but it at least give some indication on how people from different countries experience others. The main finding here is that the informants states that they communicate different depending on the culture of the other person.

## **4.2 What are the most important communication challenges**

In this section, I describe the other most common communication challenges. The section is divided into subsection according to the categories of communication challenges mentioned in section 2.1.3 (problems with the communication process, information overload and opportunistic behaviour)

### **4.2.1 Problems in the communication process**

Many informants mentions problems with language as the biggest challenge. A number of different language problems exists. This includes ascent, words with different meaning, different pace of speaking and problems with different non-verbal signals.

#### Problems in understanding dialects and specific words

Norwegian informants said that they have problems to understand their Indian counterparts. One informant (Executive 2) said the following two things: “One challenge is that they speak very fast. Another challenge is that they use expressions which are not common in English”. The phrase “pre-pone” is one common example mentioned (Messner W. , 2009, p. 116). This is a word that was not part of the English language but which has been adopted as part of Hinglish, English as used in India (Sailaja, 2011). The logic behind the word is quite simple. If you can postpone a meeting why can you not also prepone it (bring it forward in time)? For Norwegians who are not used to these words it is confusing. One informant, (Executive 6), who had lived a number of years in USA, mentioned different meanings of words in India and in USA. In British English, which is predominant in India, butt is “the stub of a cigar or cigarette” (Oxford University Press, 2002) while in informal North American it is “a person’s bottom” (Oxford University Press, 2002).

#### Use of irony

Another challenge is the way people in different cultures speak. Danish informants stated that in Denmark it is common to speak with more irony than for example in India (Trompenaars & Hampden-Turner, 2011). This can easily lead to misunderstandings. If the Indian counterpart do not understand that what is said is irony, then there is a gap in the communication process (Grenness, 1999, p. 166).

#### Generalization

In addition to irony, generalization was mentioned as an issue by one of my informants (Consultant 7). He use the example of a Dane having a driver when visiting India. His company, like many other companies in India, provide their guests with a driver. Some days the driver pick up the guest in the morning and drop her at the office. Until the guest is picked up again in the afternoon the driver has no particular task. According to the Indian informant, some Danes generalized from this and thought that it is an Indian attitude to wait for work to happen. This is a typical example of a misunderstanding based on non-verbal communication. The Indian hosts maybe did not even realized that there was some communication happening here. The Dane had noticed something and made some (wrong) general assumptions based on this.

#### Translation and use of native language

My Indian informants quite regularly pointed at translations as a source for communication problems. When they work with UK or US, they work with people in which they, at least to some extent, share language. When they work with Norwegians, Danish or other European countries this is quite different. Most of them stated that it was easier to communicate with people whom they share language. It is also quite common that the business language is Norwegian, and that even technical specifications might be written in Norwegian. In only a few projects where I have worked we have managed to keep English as the only project language. In most other cases, there has been a mix and translation challenges exists. See also quotes below regarding the need for an offshore middleman.

The use of the mother tongue instead of English in meetings is also a potential challenge. When I worked as the only non-Hindi speaking person in an Indian team it happened sometimes that my colleagues switched to Hindi in the middle of the meetings. Luckily, I quite quickly understood that this was something they did because it was easier for them to explain difficult issues to each other in that language. If I had not understood this, I guess that I easily could have become frustrated. This happened particularly with younger, less experienced colleagues. Some Filipino informants mentioned that the same also happen there.

Another problem related to translations is people from particularly Nordic countries, who does not know the right translation to English. Because English is so close to for example Norwegian, it is tempting for a Norwegian just to translate the expression word by word to English. Sometimes this can be completely wrong. One example is the expression 'registrere en sak'. When an unplanned interruption to an IT service (an incident) happen, one of the first steps to do is to log the incident (Office of Government Commerce, 2007). In Norwegian, it is fine to say 'registrere en sak', which word by word translated to English, is 'register a case'. When I said this to my Indian colleagues, they asked me if I was going to the court. That is the place where 'cases' are handled in India. I should have used an expression like 'raise a ticket' or something like that instead.

English informants mention the same challenge in understanding the spoken word. They just experience it slightly different. As said by one of them:

“Those who are using English as their second language have a more limited vocabulary. As a native English speaker, it is always me who have the responsibility to make sure that the other person understand”.

### Misunderstanding of non-verbal signals

The language challenges exist both in the verbal but also in the non-verbal (Short, Williams, & Christie, 1976) communication. One common example of a non-verbal signal that a number of western informants have stated that they have misunderstood is the Indian wiggle (Messner W. , 2008, p. 116). The fact that Indians shake their head when they mean yes seems confusing to many. Particularly as the same signal, represent the opposite in other cultures. This situation is relevant both at the workplace and in private.

### Technical problems that prevented the communication

Some informants mentions technical problems as a communication issue. Bad phone lines and video conference equipment are some examples. The effect of such a problem was that it was difficult or even impossible to understand the other person. Particularly Norwegian informants mentions this problem. If that is because the technical equipment is worse in Norway than in the other countries is uncertain. It could also be that Norwegians uses phone meetings more rarely than people from the other countries. In Norway, it is also generally a low barrier for talking about problems. This might be because Norwegians are less worried for losing their face than what is common in for example Asian countries (Engholm, 1991, pp. 64-67). Face-saving is an area that affects the communication. Due to limited space in this thesis, I will not follow up that area further.

### Problems to get good requirements

One informant, (Executive 7) said that the communication is not the main problem. It is the lack of clear requirements. Lack of requirements could happen because of lack of knowledge. The people who are supposed to give the requirements does not know how to make proper requirements (Alexander & Stevens, 2002, p. 11)

## **4.2.2 Information overload**

Only a few informants mentions information overload as a problem. One main reason for this is probably that I did not ask particularly about this. The informants mostly mentioned problems related to the communication process as such and more about misunderstandings than information overload. A few informants mentioned that they drowned in e-mails. This

indicates that there might be some underlying challenges related to information overload. Some informants also stressed that the use of channels like chat have reduced the amount of e-mail in the organization. Not all informants were purely happy with this improved technology. Some mentioned that there are too many available channels for information and too much information (information overload). They thought that this might be an even bigger problem in the future. With improved technology, some informants stated that people would be bombarded with more information. This makes it even more difficult to sort out what is the most important and relevant.

### **4.2.3 Opportunistic behavior**

Some informants mentioned opportunistic behavior. They said that there might be a reluctance to share information, particularly between different offices (Suzuki, 1998). One of my informants described this as “old fashioned behavior” (Executive 2). By this, he means that people have a wrong attitude towards what they can share with others and what they cannot share. He said that this clearly affects how well a customer and vendor can work together. Another way of indirect opportunistic behavior is the use of language. This typically happen in projects where the onshore country is not native English speaking. Even if there is a vendor or even colleagues in other countries, some of the communication is still at the native language. One prime example mentioned is old documents that might be in Danish, Norwegian or some other language that Indians or Filipinos do not understand. In some cases, it is still a requirement that documents should be in local languages even if that prevent the information sharing.

One informant, (Consultant 8) mentioned that he could sometimes find himself at the end of a longer e-mail trail. The first mails would be in Danish and it is only the last one to him that is in English. In a situation like this, he would take the extra effort and use a tool like Google translate and translate the whole mail trail. He said that it was not rarely that he realize that there was a deviation between what was the original issue in the first mail and the issue presented to him. Due to this he would then have to go back to the person he got the mail from, have this person to go back in the chain, and try to find out what was really the message that should have been communicated to the Indian colleague. The informant mentioned two areas here that he considered opportunistic. One was that he had not been included in the mail initially. The second is that the Danes did not took the effort to explain properly in English.

Some informants said that they had experienced opportunistic behavior, like unwillingness to share information, in their projects before. If it is a case that they do not have any sort of those problems anymore or if they just did not wanted to tell this to me, is unknown.

The unwillingness to say no, mentioned by a number of informants might also be considered opportunistic.

## **4.3 How are misunderstandings resolved**

The way to resolve misunderstandings were uniform regardless of location. People in different locations did not have particular way to resolve which stood apart from the others. There were three main group of findings; changes in the communication process, use of new technology and the use of an offshore middleman. Hence, this section is divided into these under-sections. The section is summed up with findings regarding what communication channel was seen as the best one.

### **4.3.1 Changes in the communication process to mitigate misunderstandings**

Quite a number of informants have developed more or less formal processes for what to do to prevent misunderstandings from happen.

#### Confirm/repeat/rephrase

The most common way mentioned to mitigate the challenges is to try to make sure it is understood correctly. The informants have different ways to confirm that they understand the message. One informant, (Project Manager 2) always asked the other part to confirm his/hers understanding. Another informant (Consultant 15) at the other hand made sure that she always is the one who takes the minutes from the meetings. She then have the ability to repeat the message, and confirm her understanding. Other informants mentions similar techniques. Rephrasing of a message is also a common technique. One way of doing this is to answer to the sender, but by using slightly different words. By doing this, the sender can quickly find out if the message is understood or not.

#### Cultural training

Cultural training is also mentioned as one way to mitigate communication problems. The idea is to learn Indians how Danish communicate and vice-versa. One way is to use a role-play. Some specific situations are gone through and the employees learn what to expect from a person from a different culture. Some of the informants use E-learning modules that explains cultural values in different countries.

#### Use of pictures/drawings

One informant said, “A picture is worth a thousand words” (Executive 7). By this, he did not say that people always have to be face to face and to make drawings. He emphasized the need of a good IT-design and usage of design tools like Visio or PowerPoint. Without a proper IT-architecture, it is difficult to communicate properly about what is to be delivered, he claimed.

#### Escalation

Some younger informants said that they escalate to their managers if any misunderstandings that they could not handle occurred. Based on the answers I got it sounds like their willingness to escalate is quite high. There also sounds to be a fear to ask the customer or colleagues in Denmark to repeat or to clarify in case of misunderstandings. As one said:

“I would approach my manager and get my manager to talk to the customer”

(Consultant 8)

This is equivalent with my own experience from India. If the communication became tense, it happened that the youngest consultants became insecure and wanted more senior colleagues to help with the communication.

#### Use of a communication plan

Some informants mentioned that a proper communication plan is extremely important in order successfully to execute projects across multiple locations. However, other informants said that they did not have any such plan in his/hers project, and have no problem with that. One informant said it this way:

“As part of our methodology we have a section about governance and communication plan... when I came up with it, it was like a light bulb moment”

(Executive 1)

When one informant, (Project Manager 2) was asked about the use of a communication plan in her project she answered, “Not related to that”. Then the question was evaded. She answered that changes are always communicated by mail (in writing), but there was no overall communication plan as such.

Other informants answered the same as her (Project Manager 2). Some acknowledged that a communication plan sounds like a good idea and something he would try to implement in the project. By saying this, the informant acknowledged that she previously had not considered the use of a communication plan.

Most informants said that they do not have any such communication plan in their organization. They just use their experience. One question is then what people who do not have the same experience do. One informant, (Executive 6) mentioned that one of the (major) communication challenges in the company is related to new people/fresher’s. They do not know what tools to use, which reduces the quality of the communication. The way this problem was mitigated was through experience. By using the tools over time, even new people will get to know how to use them correctly. The company have a strong code of conduct. The informant said that:

“Bad language in an e-mail can cost you the job”

(Executive 6)

Another finding is the use of a tracking tool like Jira<sup>10</sup>. This is a tool used for tracking bugs. Particular rules for how to communicate on specific tasks can be created in the tool. Based on the severity of a defect, communication have to be handled accordingly. If for example the defect was tagged as severity critical the rule is that, the person who got to work with the defect have to call within 10 minutes. If the severity is only medium, then answer by e-mail within 5 hours is maybe acceptable. This way the tool decide, to some extent what communication channel to use in each specific situation. Those who worked with defect management (Consultant 14) mentioned this tool the most.

### **4.3.2 Use of technology**

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<sup>10</sup> <https://www.atlassian.com/software/jira>



Some informants said that in case of misunderstandings they would use a different technology/communication channel. E-mail was singled out as the channel that caused most of the misunderstandings. The most common way to mitigate misunderstandings through e-mail was to use a more synchronous channel. This could be either phone or chat. One of my informants (Project Manager 9) said this when asked about what she do in case of any misunderstandings:

“I just call them”

(Project Manager 9)

Many other informants echoed the same. One informant (Executive 2) said that he would spend most of his time on the phone. His job is to work as a boundary-spanner and the phone was his most important tool. Another informant (Consultant 16) said very much the same. She said that she spent almost half of her day in the phone. Many also stated that they uses a mix of technologies. Most of the communication goes through e-mail. In case of any misunderstandings, people ping each other and have a quick chat to try to solve the issue. If this is not enough many would then use the phone.

The very first informant I interviewed stressed the importance of new technology. His organization installed a chat-tool only a few years ago. He claimed that this to a huge degree solved some of the communication challenges. Through chat, it is now possible easier communicate with people in other locations. Another informant I interviewed early stated that

“The introduction of new technology changes the power balance in the organization. Earlier it was only those who were good in verbal communication who managed to raise their opinions.” He further said that

“Power is tightly connected to communication skill”.

(Executive 2)

This finding also illustrates the importance of power and hierarchy in an organization. As discussed below, this is a huge area in itself, which I find to be outside of the limits of this thesis.

Almost all informants stated that new technology changed the way they communicated and that this was very helpful. Nevertheless, there was also some clear differences between the informants. One Indian informant said it this way:

“Skype have changed the way we work! 5-10 years ago, there was nothing like Skype or the bandwidth that exists today. The infrastructure coming together has made a big difference in India”

(Executive 4)

Many informants mentions both Skype and bandwidth. Many companies use Skype for their communication. I visited companies where every new employer would get a Skype account as well as an e-mail address the day the person starts in the company. Some places they have web cameras at each computer and uses this extensively when communicating across locations. However, a number of informants complained that the quality of Skype decreased after it was purchased by Microsoft (Microsoft, 2011). Due to this some companies uses other tools for chat now. Some companies even uses two or more different chat tools. It seemed like the interest for new tools for chatting is higher in countries like the Philippines than in Norway. This might, as discussed in the theory section, be because Filipinos to mostly use SMS instead of calling. The new chat applications is then quite appealing. In Manila, most coffee shops and restaurants have Wi-Fi installed. For the price of a cup of coffee, a person can chat with friends and colleagues all over the world. During my trip to the Philippines, I used this extensively and never had any bandwidth issues. However, particularly some Indian informants see lack of bandwidth as a challenge. Some said that it is still too expensive to install bandwidth that allow everyone to use Skype, particularly with camera. Some also said that because not everyone communicate with the counterparts at other locations, this is not needed.

Improved phone is also mentioned as a help in the communication process. Some informants have phones with inbuilt camera. This helped to get to know the other person and to ease the communication. As one informant said:

“My camera is always on. I have no problem in seeing anybody. Connecting the name to a phase make things much easier. When the phones with camera came in it is always a chitchat first. It helps in building relationships”

(Project Manager 9)

However, this was not necessarily the norm in the company. The informant said that many people turned their cameras off. According to my informants this is not very common in Asia, but more so in other regions.

Other informants also mentioned how a camera at the computer would help in the communication. In his company, they did not have this as a standard tool and he said the following:

“It would be really good for everyone if they allow us to use the web-cam over here”.

(Executive 4)

In that particular company, only senior executives use laptop cameras. Problems with bandwidth was mentioned as the main reason why this is not common for everyone.

#### Use of modern communication tools while travelling

Use of mobile phones also have changed the communication timing. Not just for regular calls, but also the fact that it is possible to chat with people while not at office. Indian informants in particular mentioned extensive travels to and from office. Many companies in India uses private busses or cars to get people to and from office. During these trips, some informants use their phone to chat with colleagues in other countries. Skype is the preferred tool for these office chats, while they use other tools like WhatsApp for more informal chats with friends.

Some of the informants use their own private phone for such conversations, while other have a separate company phone. Informants who works in international investment banks typically have a separate phone for office. Some have phones where they can call everyone within the company through VOIP from this phone. According to one informant, (Project manager 10) chat functionality is often disabled at these phones, due to strict American legislation. They use the phones for calls and e-mails, which are always recorded.

One Indian informant (Executive 7) stressed the importance of now being at the same network across different locations. A few years back (2005-2006 is mentioned) there was different networks in different locations. Code was sent through e-mail instead of being at a shared server.

### 4.3.3 Use of the offshore middleman

Many of the informants have in their projects at least one person placed at the other location. However, there seemed to be some differences in how this was done. Most of the Norwegian informants mentioned the importance of having consultants from the offshore location (mainly India) in Norway. They have more diverged opinions regarding the need of having a Norwegian placed permanent in the offshore location. More often, they preferred shorter visits. Informants from other countries seemed to think that it is more important to have someone offshore than Norwegians. The number of informants here is surely low so it is difficult to say anything generic about this.

A Norwegian informant with long experience from India have some opinions regarding the usefulness of an offshore middleman. He had worked with two different projects with different Norwegian companies. In both cases there had been Indians working in Norway. He stated that, “It wouldn’t have been possible without Indian consultants being in Norway” (Executive 2). The first Norwegian project opted not to have a Norwegian full-time in India. The informant said that they did not even considered doing that. Two reasons were relevant here. One is that this customer is a global company and used to deal with people from all over the world. Another reason is that the role for the Norwegian project manager at the customer side was just as much inwards in the organization as it was to deal with the vendor. The second Norwegian company is in a different situation. They work mostly in the domestic market and have less experience in working with large offshore projects. This project was initiated shortly before I did my interviews. In this phase, they expect to benefit a lot from actually having a Norwegian in India.

If this is compared to what a British informant said, there is a clear difference in attitude towards using a middleman in the offshore location. The informant said this:

“At xx we consider such a role to be vitally important. We accept that India is a long way away physically and also culturally and that it is impossible to breach that gulf without face-to-face interaction (even including email, chat, video-conferencing, etc.)”

(Executive 1)

Based on this it is clear that the British informant found it more important to have someone placed in Indian than what the Norwegian informant did. It is however difficult to say

anything generic about different attitudes towards an offshore middleman between Norwegians and British based on only these two informants. A Norwegian informant who have experience from a project where there not had been any middlemen at the offshore location gave a comment, which was almost like a prayer for a middleman. She said that:

“The supplier’s Norwegian project manager should have travelled to India to anchor the methods with the developers before the project started”.

(Project Manager 2)

Why this was not done is unknown to me.

Indian informants also emphasized the importance of having foreign people present together with their offshore team. They also pointed at different needs from people from different countries. One of them said it this way:

“Norwegian clients coming here for a week makes a lot of difference for him”.

(Executive 3)

He went on to say:

“The body language says a lot... it would be good when someone sits here”.

He also stresses the importance between American and European customers. In US, it is not common to meet the clients, because of the huge geographical distance. This mean that American customers work more without intermediaries.

Some Indian informants who worked with Denmark and have a Dane sitting with them full time said that they experienced some noticeable benefits with that. One thing they said was that it was good for their morale. They felt they have a much higher degree of exposure to their Danish colleagues when they have a Dane sitting together with them. Having him/her telling the colleagues in Denmark how well the team in India works is much better than having the Indians to say it themselves. The most important benefit, they said, was that he could help them out when they have language problems. They claimed that some of the Danes in Denmark are not fluid in English. Having a Dane in India help a lot in the translation. A Danish informant working in India also stressed the importance of having someone who know about the technical systems in India. Particularly in a knowledge-transfer phase is this

important. In addition, for a longer duration is it valuable to have someone who really know the systems present with the offshore team. I should point out here that the Dane in this example have quite extensive experience from the actual company. Other informants also stressed the importance of being close to the business. In one example, the company have a business office in India, not just IT-development. Quite often, the developers, who were located at one part of Mumbai, travelled to the office where the business side is located. This to gain the all-important business knowledge without having to travel to offices in London or Hong Kong.

Another activity that the middleman often do, which I have also experienced myself, is to select people to work in a particular project. In Indian recruitment of people often happen in a slightly different way than in Norway. As said by an Indian informant, who is a leader of an Indian consultancy company:

“In India the family culture is very strong... if somebody tells ok, he’s a new developer and he’s known by me, then I will close my eyes and take him”

(Executive 3)

This way of doing recruitment might work in India, and other places in Asia, but a Norwegian company would maybe not do it this way (Clegg, 1991, pp. 165-166). A Norwegian who works in India pointed at the same. He said that in some cases developers who have other family members in leading positions in the company were selected rather than people who have the right competence. Only when a Norwegian was sent to India this was discovered. In this specific example the developer with family connections were removed from the project. I will make it very clear that I do not make any genuine conclusion that this way of recruiting people based on family connections is the norm in India. I do guess it is quite more common to recruit this way in cultures with strong family bonds. Many places it is considered that family members will be the right people to do the job, because they will have a stronger connection to the company than outsiders (Cappelli, Singh, Singh, & Useem, 2010).

Legal constraints might also be a reason to enforce the use of a middleman. Offshoring increases the risk of data theft (Data Security Council of India, 2012). One informant mentioned that there might be a need to have someone from the risk department located at the offshore location. This would not be from a delivery point of view, purely from a compliance point of view.

Some informants mention the relationship between the offshore and onshore organizations as an important factor. In multinational companies, there might be a we-against-them situation between the onshore and offshore team (Suzuki, 1998). If something goes wrong, there might be a blame game instead of one common team that will work together to try to solve the problem. The suggested reason for this is that the offshore team will act as a subcontractor for the onshore team. In some companies, the offshore team will have different KPI's than the onshore team and earn money based on how much they bill the onshore team, not the end customer. In situations like this, the middleman might be able to look into the situation and help to mitigate the challenges. If the customer/vendor setting is not there then this problem will not occur and the importance of the middleman is less.

The informants mentions a number of different reasons for working abroad. For a young Indian developer it is clearly better paid to work in Europe or US than in India (D'Mello, 2005). From a career point of view, offshore exposure is also good. For Europeans working in India two motives were mentioned. Either it was purely due to career planning, or it was because they are fascinated by the culture and wants to live there. For those who did it as part of their career planning they did not really care if it was India or some other country they lived in. Those who opted to go to India because they were fascinated by the country often came in the category of people who really love the country. It is said about India, "You either love India or hate it" (Kanojia, 2012). Based on the findings it is difficult to give some specific answers to what attitude that gave the best results. Having some understanding of what is special with any particular host country was mentioned as important.

#### **4.3.4 Findings regarding what communication channels that worked best**

Almost all informants stated that face-to-face communication works best. At least early in a project it is important to get to know the people you work with. The only way to do this is to meet the other person physical. It was difficult to get any uniform answers regarding what messages that was most suited for face-to-face communication. Some informants mentioned that the need for face-to-face communication varied according to the setting. In a client-vendor situation there seemed to be a higher need for this than in a setting where everyone work for the same company. One Indian informant stressed the fact that this highly depends on organization culture and politics. When everyone have the same KPI's the need for face-

to-face meetings is not as large as it is when people work in different companies. By having the same KPI's there is less risk that the people who communicates will have any hidden agendas. They all share the same target, which should ease the communication between them.

Some mentions the negative sides with face-to-face meetings. One is that unless proper minutes of meetings are taken it might be difficult to know exactly what have been agreed. Language barriers might prevent the flow in the meetings. A Norwegian informant made some comments about this. She said that in meetings with Indians and Norwegians they thought they had agreed on something. After the meeting, the Norwegians often have informal conversations (Greenberg & Baron, 2008, pp. 354-356). This always happened in Norwegian. If they were lucky, someone would inform the Indians about this later. If not, they miss this important information. Distinguish between formal and informal communication is an illimitable separate theme. Due to the limits of this thesis, I decide not to focus more on this.

A Filipino informant mentioned the same issue. She said that she always made sure that she always sent her understanding of what they agree in the meeting with the rest of the team on e-mail. That way everybody could come with their comments and sort out any misunderstandings before they become too serious. An Indian informant who had been in Denmark for a long duration said that in some cases the Indians were suggested not even to participate in some meetings. The reason was that the language in the meeting would be Danish. In these situations, someone explain the outcome of the meeting to the on-site Indian consultants only after the meeting.

Quite often face-to-face meetings are not possible. In that case, most of the informants preferred to use the phone rather than e-mail. A phone gives the opportunity to get an answer immediately. A few informants said that they would prefer e-mail rather than phone. Their reasoning for this was that on e-mail you could easily track back and check what was agreed. If the communication is only by phone, then this information is not available.

One informant, (Consultant 13) mentioned that the message is understood different dependently depending on communication channel. When he received an e-mail from his Norwegian counterpart it quite often sounds like the Norwegian was unhappy with the execution of a task. The language in the mail felt quite shroud. When he picked up the phone and called the Norwegian the opposite was actually the case. The Norwegian was quite happy



with execution of the job. It was just that he had not managed to write the right words. The same experience is applicable also for myself. While writing mails in India, at least initially, I used stronger words than what I probably should have done. This happened mostly because of my lack of vocabulary. Without knowing the proper word, it became tempting to use stricter words, just to make sure my message was clear. In oral communication, this is easier as it is possible to explain in more details.

## **4.4 Summary**

This chapter shows that most of the findings related to what communication challenges that exists are related to the communication process. Challenges with information overload and/or opportunistic behavior is not that frequent mentioned.

All informants mentioned a huge number of different techniques they use to mitigate the communication challenges. This varied from simply rephrasing a statement, via changing the communication channel to changes that are more significant like using a middleman or creating a communication plan.

In the next chapter, I discuss what mitigation techniques that might work best for each of the challenges.

# 5 Discussion

In the theory chapter, I described three different communication challenges (challenges in the communication process, information overload and opportunistic behaviour). I discuss these findings according to these three categories of challenges. Almost all informants mention challenges due to cultural differences, but not necessarily related to one or more of the challenge areas described above. Hence, it could be an idea to discuss this in a separate section. At the other hand, the cultural differences is an underlying factor, which affects all communication. If I take this approach, cultural differences might be embedded into all the different categories of communication challenges. I have taken this second approach and included challenges due to different cultures in the discussion of the general categories stated in the theory.

In section 5.1, mitigation of problems in the communication process is discussed. Discussion on how to mitigate problems with information overload is in section 5.2, and finally how to overcome opportunistic behaviour is discussed in section 5.3.

## 5.1 Challenges in the communication process

The communication process contains a number of steps, as described in Figure 1 Shannon-Weaver model for communication. In this model, I described that the process consists of the following elements: 1) the source who encodes the message, 2) the actual message that is being communicated, 3) the communication channel that is being used and 4) the receiver who decodes the message.

### Where in the communication process the challenges exist

Different findings are related to different parts of the communication process. The problems to understand dialects and words, and translation and use of native language are connected with the decoding process. At least it is experienced most strongly in this phase. As shown in Figure 3 Communication across cultures (Thomas & Inkson, 2009, p. 88), different cultural fields can be one reason why this problem occurs. This problem might occur simply because the sender and receiver does not speak the same language. Even if the problem is experienced in the decoding process, it can also be a problem in the coding process. If the sender knows that the receiver will struggle with decoding due to difficulties in understanding the dialects or

words, he/she could have mitigated this by rephrasing. Use of a different communication channel, like written instead of oral, might also help in case of challenges due to dialects.

Challenges with irony and generalization is slightly connected with the problems described above. The problem is experienced in the decoding process, while the main cause of the problem might be in the coding process. Particularly use of irony is something that the sender should avoid if he/she know that this can lead to misunderstanding. Use of irony is considered as a main challenge while communicating across cultures (Trompenaars & Hampden-Turner, 2011, pp. 73-74).

Challenges caused by non-verbal signals is again experienced in the decoding, but caused in the coding. There might also be a problem due to the selection of wrong communication channel. If the sender understands that there might be challenges due to non-verbal signals, she should maybe use a more formal and written communication channel instead.

Finally, challenges due to technical problems is more likely due to the selection of a wrong communication channel. If a particular communication channel is vulnerable, then that channel should probably not be used. At least not if there are other options.

### **5.1.1 How to prevent challenges in the communication process**

Some of the findings related to how to solve the communication challenges are directly related to problems in the communication process. I discuss those findings below.

#### Changes in the communication process

When the informants experienced challenges in the communication process, they quite often tried to change the process in order to overcome such challenges. They particularly mentioned the use of repeating/rephrasing/confirmation. What they are doing then is to give feedback to the initial message. Proper feedback might be a useful way to mitigate communication challenges. The feedback give the sender an opportunity to understand whether or not the message is decoded as intended (Rogers & Agarwala-Rogers, 1976, p. 13). If the repeated message indicates that the receiver has misunderstood something, the sender have to resend the message. In oral communication, this might mean to say it again. In an e-mail conversation, it means to send a new e-mail, where the message is transformed and explained better. Alternative the sender could use a different communication channel when resending

the message (Dennis, Valacich, Cpeier, & Morris, 1998; Carlson & Zmud, 1999). The rephrasing of the message is a tool I used extensively when I was seconded as an offshore middleman. When my Indian colleague said something to me, I replied by stating what I thought was correct, but by using different words. I made sure to look at the facial expression of my colleague to look for signs of confusion. If I noticed any such signs, I made sure to get him/her to recode the message and send it to me in a different way. Likewise, I always tried to get my colleague to restate what I said to make sure we had a common understanding.

Use of pictures/drawings was another suggestion on how to improve the communication process. Pictures/drawings in addition to oral speech or writing can be seen as a change of the communication channel, or maybe rather as using two channels instead of just one. Instead of putting faith in only oral communication, the sender chooses to add pictures/drawings. By doing this, the message might be clearer for the receiver. If the pictures indicates something different from what the sender say, the receiver might be confused. However, this might be a good thing. In case of disambiguation, the receiver should try to clarify what is correct. Is it what the sender says or is it what the picture shows? By having sent the message to two channels simultaneously, the sender have given the receiver two opportunities to decode the message correctly.

### Use of technology

One important task of the coding of the message is to select the right communication channel. In the theory chapter, I described a number of theories regarding how to select the right communication channel. Previous research indicates that different channels have different areas in where they fit best: “Synchronous communication, such as face-to-face meetings, online chats, teleconferences, and web conferences, is ideal for quick status meetings, brainstorming sessions and reviews. Asynchronous communication such as email, discussion forums, and share documents, provides a persistent record of discussions” (Kussmaul, Jack, & Sponsler, 2004). Many of my informants said that they prefer to use chat or phone calls rather than e-mails in their conversation. In these situations, my informants act as the source of the communication.

One important question is to what extent the receiver might use technology to help with the decoding process. Based on the findings it seems like most of my informants preferred face-to-face communication instead of technology. However, lack of focus on the recipient in

previous research is a challenge (Sitkin, Sutcliffe, & Barrios-Choplin, 1992, p. 568). Some of my informants said that they use tools like Google Translate and even custom-built tools to help them in converting information from a language unknown to them to English. This is one example on use of tools to help the receiver decoding the message. The actors will use the technology as a kind of an expert system as defined by Giddens (Giddens, 1990). It can also to some extent be said that new technology help receivers in a way that they can quicker sort out misunderstandings. Being able to ping the sender to clarify immediately instead of having to send an e-mail and ask for clarifications is surely useful. The feedback from receiver can happen much quicker with help on new technology. The feedback loop has been shorter.

This indicates that there might be correlation between what culture the sender and receiver is from and what technology that would work best. American companies usually work with written agreements while Japanese companies tend to prefer verbal communication. They also prefer less frequent but more formal use of electronic media (Krishna, Sahay, & Walsham, 2004). I was told by a Japanese friend that when a Japanese send an e-mail they will check the hierarchy and find out which of the recipients are the most powerful and set that person as the first receiver. This would probably never have happened in Norway. As a sender (initiator) of the communication process, you are the one who decide what tool to use. The receivers' preference of channel should not be underestimated (Browning, Sætre, Stephens, & Sørnes, 2008, pp. 149-150). If you start the communication by initiating a chat, you will probably not get the answer in e-mail. Another example is the use of camera in a chat session, as mentioned by one of my informants. If you have your camera of, it is quite likely that the receiver will also keep his/hers camera of. On the other hand, if you have your camera on, you indirectly also indicates that you want the receiver to have it on.

This discussion indicates that new technology can help the sender in a number of ways. Technology can help to carry more data faster than traditional media. E-mail, blogs and wikis are all examples of communication channels that are more efficient than traditional media like post. These channels can carry much data very quickly. They also help to spread the information to a large number of recipients. Other technologies like chat and videoconference are quite good to carry meaning. They are also more cost efficient than face-to-face meetings. In global IT-projects, this is an important attribute. By using such media, the meaning of a message is transported quickly. Another advantage with these communication channels is that

they improve the ability to give quick feedback even across long distances. By reducing the time for the feedback-loop, misunderstandings can be solved quicker.

While deciding the use of new technology the sender should consider both his/hers mission and that of the receiver. What seems the best channel for the sender might not be the best for the receiver. Even if it is tempting for the sender to send a chat message or to call to get something clarified quickly, that might not be the appropriate thing to do. The receiver might find the use of such a channel too pushy and become irritated rather than to answer quickly. This will ruin the initial advantage of using new technology.

### Use of an offshore middleman

Let us now look into to what extent the use of an offshore middleman might help in the communication process. There are three, quite interlinked questions, to answer here. How can the middleman help the people in the location where he is? How can he/she help in his/hers home location? Finally, how can he/she help in improving the communication process as such?

Let us first look into how the middleman can help with the communication in the location where he is. Many of the informants points to the actual understanding of people from different cultures/countries as a main problem. This indicates that it might help to have someone who can mitigate simple language confusion with the team (Sødeberg, 2012). When for example a document that is written in local language is sent to the offshore team, the middleman can quickly help with the translation. The same is also the case in phone meetings. This was a role that I had a number of times myself during my stay in India. When a Norwegian dialed the team in India, it was quite often difficult to understand what he/she said. By being there, I could help the Indian team to understand the accent and difficult words used by the Norwegians. Even if the two teams share the same language, a middleman might be very useful (Hanisch & Corbitt, 2004). As the communication problems escalated in the project, more middlemen were assigned to the other shore.

When it comes to how the middleman can help in the home location, much of what is said about the help in remote location is also applicable here. Help in phone meetings or with translation of documents can be done exactly in the same way. This lead to the question of whether or not it is needed to have a middleman in both locations. One of the informants stressed the importance of this. With a middleman at both sides, it makes it possible to gain

more knowledge about the informal communication that happen at the other location. It also connects the two groups in a better way. This can help to prevent problems with in-groups and out-groups (Sønne, Søderberg, & Tøth, 2013).

Help to improve the communication process is quite different from helping in the day-to-day communication. A middleman would have gained experience that can help in improving the communication process as such. In order for this to happen, it is necessary that the company do have some clear communication plan and a willingness to improve the communication. My findings indicates that there is a difference among companies on how important they feel this is. Some companies really have plans for how to get new people to learn how to communicate in the organization. Others just pointed as that of being a newcomer as a challenge. There are a number of different ways that the communication process can be improved (Kaufmann & Kaufmann, 2007, pp. 310-). The middleman is better suited to help in some of the areas in the process than other. The first way to improve the communication is to listen carefully. This includes paying attention to what is said, really to understand the message, to remember it, clearly to show the sender that you are paying attention to what is being said, to evaluate the message and to interpret it correctly. A lot of this is quite difficult to do unless you see the person you communicate with, and hence a middleman is of great use. Active listening is a skill that takes time to master. When sender and receiver have different cultures and maybe even different mother tongue it make it even more difficult. Some of my informants usually get a new boss from the home country of the organization every 3-4 years. They said that a main problem for a new boss would be exactly this to really understand what the employers meant by what they said. My own experience from corresponds with this. Only when learned to know the people I worked with was it possible properly to interpret what they said. After this learning is accomplished, the active listening improves. It is then also easier to do a better job as a middleman, and to explain properly to the home country.

Next step to improve the communication process is to handle feelings. When the sender for some reasons have particular emotions it might make the receiver think that he/she is irrational. The root cause for such emotion can be hard to tell without knowing the sender. They can very well be caused by something outside the office. People in different cultures can have different reasons to become emotional. Without a proper knowledge of the country/culture you work with this is difficult to understand. This is quite difficult to explore without being physical present. It require a good deal of trust to tell someone else if you for

example have any personal problems. When I lived in India it happened some times that people were away from office for a longer duration. This could be because they were preparing to get married or because of sickness in their family. Such big events will quite clearly have an impact on a person's emotion. Without seeing that the person was actually not at office I would not even asked questions regarding if something had happened or not. It must be said that the ability to learn how to interpret someone's emotions can be learned without being a middleman. A good manager will have this competence and will understand when something is wrong. It is however more difficult to understand this just based on written communication than it would be if you could actually interact with the person face-to-face.

One more way to improve the communication process is to look for non-verbal signals (Pease & Garner, 1993; Messner W. , 2009). People in different cultures have different ways to express themselves non-verbally (Eibl-Eibesfeldt, 1972). It takes time to understand the rules and conducts for non-verbal signals in different cultures. This is quite difficult to do without seeing the other person. Some of the informants mentioned the use of cultural training as a way to do this. Role-playing virtual games is a one specific way to help in this area.

The last three factors to remove communication barriers according to Kaufmann & Kaufmann is to simplify the language, to use feedback and to control the information flow. When it comes to simplifying the language use of feedback this is something that is applicable to everyone, not just the middleman. Control of information flow is closely connected with prevention of information overload and is discussed in that section.

### Communication plan

A communication plan might not help directly to solve problems in the communication process. A good plan might prevent problems from occurring. The plan states describes ways to ensure a proper communication process. The use of pictures/drawings should be stated in the plan. A good communication plan should also contain information about when to use what technology/channel. These guidelines will make it easier to choose the right channel, which will reduce the risk of misunderstandings.

## **5.2 Information overload**

Research indicates that different cultures have different perceptions regarding what is information overload. A comparison between Americans and Koreans detected that "Korean



managers found computing to cause much information overload for operational decisions. This is also consistent with high context culture, more accustomed to interpersonal communication” (Calhoun, Teng, & Myun, 2002, p. 299). Interestingly both Filipinos and Indians are defined as high context cultures while Norwegians are more low context culture (Barrett, 2006). How can it be explained that Norwegians and Danish mention e-mail overload more than what Indians do? One reason for this might be the nature of work that managers in different countries do. Both India and Korea are examples of countries with a higher power distance than Norway and Denmark (Hofstede, Hofstede, & Minkov, 2010, p. 61). This should indicate that Indian managers spend more of their time on management than Norwegian managers, who due to more flat organization structure are supposed to do other tasks also (Hennestad & Revang, 2012, ss. 106-; Lima Bru, 2013). Differences in organizational hierarchies is a huge area in itself (Jacobsen & Thorsvik, 2007; Greenberg & Baron, 2008). Chapter 3.6 shows one example on how hierarchy might affect the communication. As this is a limited thesis, I have chosen to focus more on other areas.

The Indian work system “produces managers who only believe in managing people and not in assisting them” (Khare, 1999). This statement is quite blunt, and given to compare differences between Indian and Japanese work patterns. As I do not have that much experience with Japanese work culture, it is difficult to judge this. It however underlines my previous statement that Indian managers to a higher degree than for example Norwegian managers do high-level management, while managers in other cultures do more low level management. The more extensive use of e-mails, with copies to managers, in countries as India might even signal competence. Sønne et. al say it this way: “...the frequency of email and instant messenger (i.e. chat) correspondences, which the Danes allegedly perceive as very intrusive, interrupting and somewhat rude, whereas it is customary in India to communicate extensively via these channels simply to signal competence” (Sønne, Søderberg, & Tøth, 2013, pp. 16-17). Based on this it seems that what is considered information overload differs between countries, and that the communication tools used must be “situated to the local context of use” (Rolland & Monteiro, 2002, p. 87).

### **5.2.1 What are being done to prevent information overload**

As said in the theory, information overload is the problem of getting too much information (Eppler & Mengis, 2004, p. 324). In this section, we will look into techniques mentioned by my informants regarding how to mitigate this, and to compare it with the relevant theory.

### Cultural training

Some of the informants mentioned cultural training as a way to mitigate communication challenges. This might be particularly useful when it comes to information overload. As shown in the research mentioned above, people in different countries will have different opinions regarding what is too much information. By getting some knowledge about the receiver's country, a sender who regularly communicates with someone in that country can adjust his communication accordingly. If you know that Norwegian managers want to be copied on e-mails only in case of emergencies, while Indian managers are ok to always be kept in the loop, then you as a sender should act according to this. While some persons might like to be in the loop, others might be frustrated because of overload.

### Use of pictures/drawings

The old saying of "a picture says more than thousand words" is still applicable. Use of regular blackboards are difficult when the team is located at different places. The use of electronic tools is helpful here. By sharing the screen, it is possible for the receiver to see a drawing made by the sender. This can in some situations be quite useful, and reduce the need for long e-mail trails. Here is one example of how new technology enables the two parts to use communication media which was earlier not possible across distance.

### Use of a communication plan

Some of the informants mentioned the use of communication plan as important in their projects. A proper communication plan will include guidelines about when to use what specific communication channel (Horine, 2013). By following such guidelines, it is possible to reduce the number of e-mails in the organization. The communication plan might include specific rules about when to use e-mails as the mode of communication and when to use other channels. In order to get any of this to work properly, proper planning of the communication is important. By planning the communication properly, it is possible to avoid the large supply of information, which might not be relevant (Butcher, 1998).

## Technology

When discussing how information technology can help when it comes to information overload, it is probably more a question about how information overload might be restricted due to usage of new technology. Some of the informants stated that new information channels meant that they get too much information. As discussed in the theory section, e-mails is a main culprit to information overload.

An example of e-mails that can quickly result in overload is flaming (Greenberg & Baron, 2008, p. 345). This means that people are overexpressing their emotions by sending emotionally charged messages to another via e-mail. As it is very easy and quick to send e-mails this might quickly lead to a chain reaction where a number of more emotional e-mails are sent. Research indicates that the use of flaming depends on culture (Reining & Mejias, 2004).

Another question here is if new communication platforms can help to solve the information overload (McAfee, 2006). By using tools like Wikis and blogs effectively in a project, it is possible to share a lot of information without sending everything through e-mails. One good way to start is for example to send shorter e-mails, with just a link to the Wiki where rest of the information can be found. Some of the informants mentioned tools like Jira. This can also help to reduce the communication. Instead of doing all the communication in e-mails, it can be stored in a repository like Jira.

Other ways to mitigate information overload is also mentioned in the theory (Grenness, 1999, p. 135). Some of these ways do involve technology. The most relevant is maybe queuing, which means to order the incoming information so that it can be managed in an orderly fashion. Most e-mail systems do this already today. A default sort on what e-mail is the newest one is one way of queuing information. However, this does not actually prevent information overload. Using rules in the e-mail inbox is another way of doing it. Some people uses rules stating that mails from particular persons or with particular content is being deleted. Alternatively, that mail where the person is not the recipient but only copied as correspondent are being moved to a particular folder.

The same method can also be used on blogs. The newest or most relevant article are put on top. This way the administrator on the blog will help the readers to read the most relevant information first. This is a good way for a company to handle communication of information

to many people. On blogs, it is possible to show only the abstract of the article on the first page. In order to read the whole article the reader have to click on the article. If this article is not of interest for you, there is no need to waste time to read it fully.

Based on the discussion here, I have shown that new technology to some extent can help to prevent information overflow. The problem however, is that it seems like new technology adds to the overflow more than it restricts it. It is not technology as such that will increase or decrease information overload, it is the use of technology (Orlikowski W. J., 2000, p. 425). Some of my informants mentioned training on how to use the different communication channels as one way to prevent overflow. This is probably a better way than to rely on the technology itself. Learning how to use the tools is one thing. Learning how people in different cultures perceive information overflow is another way. By learning about this, we can avoid situations like those mentioned above where a Korean manager will feel that she got too much information from an American. Knowledge about what is considered as adequate amount of information in each culture is one good way to prevent information overload.

#### Offshore middleman

One of the ways to prevent information overload is to install a gatekeeper, which is “people responsible for controlling the flow of information to others to keep them from becoming overloaded” (Greenberg & Baron, 2008, p. 367). It is quite common for a middleman to act as such a person, as a boundary spanner (Aldrich & Herker, 1977).

In section 2.4, different roles for the middleman is described. In terms of decrease of information overload, it is a question about whom the middleman should help. Is it the team where he is located, the other team or both? Should this person then be a gatekeeper, one who control the message flow from onshore to offshore or should he be more a liaison, one who just connects the two cliques (Rogers & Agarwala-Rogers, 1976, p. 133)? In a role of a gatekeeper, it is part of his duty to try to reduce the information overflow. If at the other hand he is a liaison, this will not be his duty. In most of the companies where I did this research, the middleman seemed to be more of a liaison then a gatekeeper. However, it differed a bit from company to company. Some places the main role of the middleman seemed to be part of the daily activities, like daily scrum-meetings. In this situation, he does not have any particular gatekeeper role. In some other cases, the middleman seemed to have more kind of a dual role. Both to act as a liaison, to help to clarify misunderstandings, but also to work with

the management team as a gatekeeper. However, it was difficult to find any clear indication that the people I spoke with who were middlemen acted as planned gatekeepers. Maybe this was a missed opportunity by the onshore management team to use the middleman to reduce some of the information overload (Johansson & Bergkvist, 2012)?

It is important to plan this role in such a way that the middleman does not become a bottleneck (Cross, Borgatti, & Parker, 2002). If the middleman himself experience a situation with information overload, he/she will probably create even further overload because he/she will have to ask for clarifications (Shelly & Gilchrist, 1958). The best way to mitigate this will probably be through proper planning of the communication.

### **5.3 Opportunistic behavior**

In the theory chapter, opportunistic behaviour is defined as “purposely act in a way that is positive for your own needs and interest about how it affect other people’s needs and interests” (Kaufmann & Kaufmann, 2007, p. 359). However, this definition is not without problems. The first problems relates to opportunistic behaviour and communication. Should the definition be restricted to acts that is directly involved with communication or should it include opportunistic behaviour in a wider meaning? Another problem is related to the fact that the act should be purposely. Does this mean something that is done purposely by the sender or does this mean something that is regarded as purposely by the receiver? One example of this dilemma is the finding that in many cultures it is difficult to say no. The so-called MUM-effect “the reluctance to transmit bad news, show either by not transmitting the message at all, or by delegating the task to someone else” (Greenberg & Baron, 2008, p. 351; Ptacek, Leonard, & McKee, 2004) is another example of a situation that might be perceived as opportunistic. The underlying reason for this might be face-saving (Engholm, 1991, pp. 64-67). It might also be due to respect or fear for the boss. This will typical be the case in cultures with high power distance (Hofstede, Hofstede, & Minkov, 2010, p. 61). For a receiver of such information (or lack of information), this can surely be frustrating. Is it done by purpose? Is it opportunistic, or is it ok to just point at cultural differences to explain this and say that it is ok? Previous research indicates that this behavior is seen as opportunistic. Comments like “Vietnamese developers did not dare to tell if they didn’t understand the problem and tasks they were assigned...” (Moe, Smite, Hanssen, & Barney, 2013, p. 16) and “What we found out with [Indian vendor’s name] was that, you know, the maintenance team,

took only the easy bugs, and they were measured on the number of solved bugs...” (Moe, Smite, Hanssen, & Barney, 2013, p. 21) indicates that there is an unhappiness with what has been communicated from the vendors. The problem is not just related to not being able to say no. It also can be that one side feel that the other side involve themselves too much in something that should not be their concern. As a frustrated Indian engineer said about a Japanese customer:

“They go through it in detail. They take much time. I won’t be surprised if they go through the code even. They go line by line through the program they write. We were so surprised when we sent our engineer; they had four days specifically for code reading. And they went through it line by line.” (Sahay, Nicholson, & Krishna, 2003, p. 187).

In this case, the Japanese vendor just want to ensure that the quality of the code is according to their standards. The Indian vendor did not like this and consider it as being opportunistic.

### **5.3.1 How communication challenges due to opportunistic behavior are mitigated**

#### Escalation

One informant mentioned escalation as a way to mitigate communication challenges. He probably thought about challenges in the communication process. However, it seems reasonable to believe that escalation might use also in case of opportunistic behaviour. By escalating such issue to a higher level, there might be more attention on the issue. At least the managers will be aware of the situation. It is probably part of a manager’s job to try to mitigate such problems. If the manager of the person who feel someone behave opportunistic towards him brings up this issue with the person who acts opportunistic, it might be possible to find a solution. If the problem is critical, the solution might be to remove at least one of these persons from the person. This might not solve the particular communication challenge between the two people. At least it might help to prevent the overall communication process in the project to break down. This is an example on how to use the formal hierarchy in the organization to mitigate the communication challenges (Greenberg & Baron, 2008).

#### Technology

One area where technology might help against opportunistic behavior is in surveillance. In 1995, the Barings Bank went bankrupt due to illegal trade by Nick Lesson, a broker in the bank (Leeson & Whitley, 1996). Due to this and a number of similar cases, improved monitoring systems is now installed in any major financial institution (Wang, Mylopoulos, & Liao, 2002). Today there are a large number of technologies, like CCTV, which allow employers to monitor the e-mail of all their employees (Thompson, 2003). Even if such surveillance might hamper the privacy of each worker, it can probably also prevent fraud and hence opportunistic behavior (Coll, 2006). As the focus have been mostly on the negative sides of such surveillance, it is hard to say exactly how efficient such technology is. Simple bullying a colleague through e-mail will probably not be discovered through this. More serious issues, like sending sensitive e-mails to suspicious e-mail addresses, might be detected. This is in accordance with information given from some of my informants.

There is also a situation where the use of new technology might be considered opportunistic. That is when people do multi communication, which is “using technology to participate in more than one conversation simultaneously (Reinsch, Turner, & Tinsley, 2008). In some situations, it might be very good that employees have more than one conversation simultaneously. One example is when they try to explain something over the phone. If the receiver have some problems to understand it, engaging someone through chat can be a way to mitigate that communication challenge. When people participate in a meeting, this might be seen as disturbance and not a help (Stephens, 2012). The meeting manager will quite probably like all the participants to pay attention to the meeting rather than to solve other issues through chat on their smartphones. If it is ok or not to do things simultaneously is to some extent affected by culture. Some cultures do activities one by one in a monochromic order, while in other cultures it is more common to multitask (Hall E. T., 1966, pp. 173-174).

Based on the discussion above it is hard to say that new technology really helps in reducing opportunistic behaviour. It is more a question about how to reduce the opportunities to act opportunistic due to new technology.

### Offshore middleman

One of the challenges a number of my informants mention is the use of local language (Norwegian, Danish). They mention that this happen in written as well as in oral communication. It is not uncommon that documentation is written in a language that a

number of the project members do not understand. Another issue is the use of local languages in meetings. This is mentioned by a number of the informants and is something I have experienced myself.

One question to discuss is whether this is something that should be considered opportunistic or not. By using a strict definition of the term opportunistic, this might not be included in the definition. The people who speak in a local language will often do this because it is convenient for them, even if it excludes other from the conversation. Another question is whether this is good for the project or not. For example if someone is so weak in English that it hampers the communication it is probably better to allow this person to speak in a local language and then to translate it later. If this is opportunistic or not is to me a question of this is a rule, a common practice or something that happen when needed. If it were a rule that for example all documentation in a project should be in Danish, even if most of the project members do not understand Danish I would consider this as an opportunistic act (Sødeberg, 2012, p. 15). If someone switch to Danish because of lack of knowledge in English, it is clearly not opportunistic.

So how does the offshore middleman fit in here? Can he/she be to any benefit in situations like this? Previous research indicates that different use of language might be problematic (Winkler, Dibbern, & Heinzl, 2008). How the middleman might work is described in Moe & all. They discuss a situation where a lead developer from Indian is brought to Norway: “From the observations it seemed that she had become part of the Norwegian team and that she was able to improve communication between the Norwegians and the Indians” (Moe, Smite, Hanssen, & Barney, 2013, p. 11). By acting in this role, the middleman will act as a broker between the two cliques (Wenger, 1998, pp. 108-110). The middleman might manage to get the two groups closer to each other and prevent the in-group / out-group syndrome (Suzuki, 1998).

The same situation is described in the situation with a Russian vendor and a Norwegian customer (Imsland & Sahay, 2005). In this project most of the project documentation was in Norwegian and only translated to English. This highly affected the project in such a way that the two teams did not share a common language, which made the communication more difficult. For nine months, there had been no visits from the Norwegian team to Russia and the project almost broke down. After the first face-to-face meeting “more face-to-face



meetings took place both in Norway and Russia which also helped to develop a more healthy social relationship” (Imsland & Sahay, 2005, p. 117).

One role the middleman can have in a situation with opportunistic behavior is to act as an opinion leader. This is a person who have the “ability to informally influence other individual’s attitudes or behavior in a desired way with relative frequency” (Rogers & Agarwala-Rogers, 1976, p. 138). By having a middleman working with the team where there is opportunistic behavior, it might be possible to use the presence of this person to change it. The middleman can try to influence the team to work according to the demands from the onshore team. Some of the middlemen I spoke with mentioned that they have a feeling that some of the Indian colleagues have started to act more like Danish. Filipinos working in a Norwegian company said some of the same. By having some Norwegians present in their premises, they have learned how they did thing and started to do it the same way themselves. Even if there were not necessarily any opportunistic behavior there, the influence of the middleman have changed the behavior of the people.

A key element related to opportunistic behavior is trust. If you do not trust the person you communicate with you fear that that person might act opportunistic. Research indicates that this trust is difficult to establish purely with help of computer mediated communication “trust needs touch” (Handy, 1995, p. 46). Research indicates that richer electronic communication channels (video and audio conference) works better than text chat to build trust, but “face-to-face is still the gold standard” (Bos, Olson, Gergle, Olson, & Wright, 2002). One challenge that the middleman might face if there is a lack of trust is that he might be ostracized (Ouwerkerk, Kerr, Gallucci, & van Lange, 2005). In this case, the middleman cannot do much. The situation should maybe be escalated (see above) to a higher level, and be sorted out there.

Based on this it seems correct to say that the best way to build trust in a global team is to have at least some face-to-face communication. By building this trust, the risk of opportunistic behavior will decrease. This is better done by using an offshore middleman than to communicate purely through electronic channels. However, if electronic communication is the only available solution, it is better to have richer channels (for example video) than purely text based channels (for example chat or e-mail).

# 6 Summary

Based on the discussion in previous chapter, I summarize my thesis in this chapter.

In section 6.1, I describe the main findings of this research. I give some practical recommendations in section 6.2. Suggestions for future research is in section 6.3. The thesis ends with some concluding remarks in section 6.4.

## 6.1 Main findings in this thesis

This section summarizes my main findings.

### 6.1.1 The informants experience communication challenges when people work distributed across locations and cultures.

The main research question stated in chapter 1 is, “How does workers in global IT-projects mitigate communication challenges”. This question take it for granted that there actually are communication challenges in such projects. This might be a bit prejudiced, even if previous research indicates the same. However, almost all informants states the same regarding this. They state quite clearly that they have to communicate differently when they deal with people from a different culture, who work from different locations.

What that is not so clear is whether the main challenge is communicating across cultures or geographical distances. The fact that most informants states that it is challenging to communicate with people from other cultures, but it helps with a middleman indicates that main challenge is a mix. If the problem was solely based on culture, it should be assume that it would be just as difficult to communicate with the middleman as with someone at a different location. The fact that most informants seems to agree that a middleman is useful indicates that distance also matters. Previous research also supports the conclusion that it is more difficult to communicate across distance, even if everyone share the same culture and language (Browning, Sætre, Stephens, & Sørnes, 2008; Hanisch & Corbitt, 2004).

### 6.1.2 New technology seems to be useful to mitigate problems in the communication process

Another finding that was quite coherent among the different informants is the usefulness of new technology. The fact that it is now possible to have synchronous communication with people independent of location seems to be a huge improvement. This significantly eases the communication. The improved technology makes it easier to get quick answers from colleagues sitting at the other side of the world. It also makes it possible quickly to clarify misunderstandings. Improved technology improves the use of videoconferences. To see the person you communicate with seems to be very important for most of the informants. At least initially, until they establish a trust in each other.

Previous studies also supports the finding that new technology improves the communication process (Kussmaul, Jack, & Sponsler, 2004; Thompson, 2003; Greenberg & Baron, 2008). Particularly in distributed teams is new technology important in the communication process.

Even if new technology helps in the communication process, it is doubtful if it is the one single solution to all communication challenges. As shown in the next two sections, there seems still to be situations where new technology does not help.

### **6.1.3 There are no indications that new technology mitigate opportunistic behavior**

Not many of my informants mentioned opportunistic behavior in their answers. Some said that they did not experience any opportunistic behavior. Others mentioned scenarios that indicates opportunistic behavior (unwillingness to say no, communication only in native language and so on). No one who mentioned this suggested that these problems could be mitigated by use of new technology. Except from the situation with surveillance discussed in 5.3.1, I have not come across much literature, which suggests that new technology can be used to mitigate this issue. The literature indicates rather the opposite, that use (or rather misuse) of technology might even increase the opportunistic behavior.

### **6.1.4 Extensive use of new technology might lead to information overload**

Another challenge with new technology is that it might lead to information overload. However, not many informants mention this. Those who answered stated quite clearly that they are “drowning in e-mails”. Based on my own experience, this is a quite common, and

increasing, problem in the IT-sector. Too many people say this, and as the theory indicates, the problem is just getting bigger.

When my informants said that new technology is so useful, this is some kind of a contradiction. If you at one hand get too much information, and you say that new technology help you to communicate more, is not that an issue? The important here is probably the word 'more', which should have been 'more effectively' or simply 'better'. If new technology help you to improve the communication and not just increase it, then it is a good thing. If it only increases the communication, and hardly improves it, the warning signals should come up.

Section 6.2 give some hints regarding how to overcome information overload.

## **6.2 Practical contributions and recommendations**

In this section, I will try to give some recommendations, based on the findings in this research and my own experience, regarding mitigation of communication challenges in global IT-projects.

Based on previous theory, my own experience, and findings in this research, it seems clear that it is more difficult to communicate with people from different cultures, particularly located at different locations, than to people from your own culture, located at the desk next to you. As this is a known challenge, I would say that this is not any valid excuse for allowing communication problems in a global IT-project to happen. A professional project manager should be aware of this fact and act accordingly. The question is how to do this. A strategy for how to deal with this could maybe be a good starting point.

The first step in this strategy could be to assess the situation. The project manager should ask himself about who works in this project and where are they located. Simple maybe, but one of my informants mentioned a project where the project manager was not aware that his team was located in two different cities in two different states in India! He only knew that all of them was in India, and maybe presumed that they all was in the same room.

When the project manager know where his team is located, the next step can be to conduct a face-to-face session. This is particularly important if the team has not worked together before. Due to financial constraints it might not be possible for everyone to meet face-to-face, but probably at least the project manager should try to meet his team leaders at different locations.

After the project manager have an overview of his team and the communication facilities, she can start to plan the communication. All of my informants who actually have a proper communication plan in their project commented on its usefulness. In addition to have information about who participates in a steering group, when are they meeting and so on, the communication plan can also have some information regarding the use of technology. Both this thesis and previous research indicates that different communication channels works best for different purposes. This indicates that the usage of technology must be planned. It might not be possible to plan this in detail, but some recommendations should be given.

A proper communication plan might help to mitigate information overload. By knowing whom to contact in specific scenarios, it might be possible to avoid communication to the wrong person. It might also be possible to improve the usage of the right channel. A plan can give guidance about when to use what communication channel.

When establishing the communication plan, it might also be a good idea to try to measure how efficient it is. This is done both by quantitative measures and by some more informal measures. A quantitative measure is simply counting the number of e-mails the different project members receive per day. Another is to try to track time in meetings, answering e-mails and so on. A more informal way to count is for the project manager to try to assess the volume of information. If she feel that she get too much information, it is quite likely that other people in the project feel the same. By paying attention to this, actions can be taken to reduce the communication.

In addition to help against information overload, the communication plan might also help in the communication process. One way this might be done is to plan for training of the employees. This training can include learning how to use specific technology as well as training on how to communicate with people from different cultures. The cultural training should maybe include learning about specific cultures. As the findings indicates that people in different cultures will have different approaches in their communication, the training should maybe be tailored to specific cultures.

## **6.3 Future research**

This research is quite exploratory. In order to verify the findings here, more detailed case studies has to be conducted. One of the areas that has been mentioned by some of the

informants, but not tested thoroughly is the use of a middleman to mitigate communication challenges. This can be done either by interviewing people in a project where a middleman is in place, or by comparing a project with a middleman with a project without a middleman. By conducting such a study, more information about the use of the middleman might be found. One key question in such a study might be what the most efficient use of the middleman is.

Another area that might would be interesting to study further is the usage of technology. Is it as helpful as indicated by my informants? This can be studied by looking into the usage of technology in one or a few selected projects. By observing over time how technology is used by the members of the project and also what communication challenges that eventually occurs, it might be possible to get some deeper knowledge about how each technology help in that particular project.

## **6.4 Concluding remarks**

The global IT-industry is still evolving. Companies continuously look for better and cheaper places to execute their projects. This together with improved technology will increase the global communication in the future. People also move around more than what they did before. All of this indicates that it is important to focus even more on how people in different countries can understand each other. This thesis is one small contribution to this.

I hope that this thesis can give other practitioner some help on how to improve communication in global IT-projects. It has been a joy to discuss this topic with so many experts from different countries across the world.

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# Appendix 1- Interview guide

- 1) If you have any experience in working with more than one other culture, do you feel there are any differences in the way you communicate?
- 2) Do you have any examples of situations where misunderstandings have occurred due to cultural differences
- 3) What do you consider as the biggest challenges when working with people in different cultures/locations?
- 4) When misunderstandings happen, what do you do to mitigate them?
- 5) To what extent does new technology like chat and e-mail help in the communication?
- 6) How aware are you in your selection of the appropriate communication channel?
- 7) To what extent does distance affect the informal communication
- 8) What is your experience in using an offshore middleman to mitigate communication challenges?
- 9) To what extent are there any formal communication plan in use in the project?

# Appendix 2 – Observation letter



1

Master IT & Management - UiO/Oslo/Norway - Karsten Eskelund

## Letter of information, Master's Thesis Project

### Title: Exploring communication challenges in multi-cultural IT-projects

I am a researcher in the subject of IT and management at the Faculty of Mathematics and Natural Sciences at the University of Oslo, Norway. I am doing a Master's Project at this University. The project is concentrated on the subject: "communication challenges in international IT-projects". The project will further be focusing on how the communication in multicultural team takes form.

My main focus is to explore factors either contributing or hindering the effectiveness of communication within multi-cultural project teams.

In relation to this project I wish to make some interviews to supply my understanding of the context of the work being done. This will be executed in a way where no single persons are identifiable. There will be taken no notes depicting single person's activities and utterances. The main focus of the observation will be to describe the surroundings of work, and the communication-methods being used. My interest is your personal experience and not any official experience from your company. No findings from this study will be reported to the management in your company.

I therefore kindly ask you to sign this *Declaration of approval* of me conducting this interview with you. The signature is just a formality. It is a requirement because this study is approved by Norwegian Social Science Data Services.

**I have been informed about the project "Exploring communication challenges in multi-cultural IT-projects", and do approve of observation being done in my surroundings. I will not be identified in any way during this observation.**

Signature: \_\_\_\_\_

Phone number: \_\_\_\_\_

Email address: \_\_\_\_\_