

**Dedicated to my family:**

**My wonderful wife and our beautiful daughter**



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# 1.0 Introduction to the research

---

## 1.0 Introduction

The topic of interest in this paper is knowledge sharing within transnational companies. More specific the study concentrates on *enabling conditions for knowledge sharing within Aker Solutions, Baku*.

## 1.1 Introduction to Aker Solutions and the study

Aker Solutions is a Norwegian transnational company providing oilfield products, systems and services for customers in the oil and gas industry world-wide. The company employs approximately 23 500 people in more than 30 countries on five continents, with the office in Baku being one of them. In 2011 Aker Solutions had aggregated annual revenues of approximately NOK 36.5 billion and is listed on the Oslo Stock Exchange (Information found on the homepage of the company and Oslo Stock Exchange. <http://www.oslobors.no/>, [www.Akersolutions.com](http://www.Akersolutions.com)). Aker Solutions, Baku has today about 50 employees and are granted contracts on delivering and upgrading drilling equipment for four off shore installations run by British Petroleum in the Caspian Sea (Told by British technical customer expeditor in Baku).

This study was done in Baku, Azerbaijan in the spring of 2012. Interviews were conducted with eleven different employees from Aker Solutions, two British, two Azerbaijanis and seven Norwegians. In addition one Norwegian humanitarian worker with his British wife and one Norwegian teacher at a university in Baku was consulted regarding the cultural aspects discussed in this thesis. All the interviews with the Norwegians were done in Norwegian, the rest were done in English. Quotes from Norwegians in the presentation of this study have been translated into English by the author.

## 1.2 Organization of this presentation

Chapter two, three and four builds the theoretical foundation for the thesis (figure 2). Chapter two explains the basic concepts of ‘knowledge’, chapter three deals with ‘knowledge management’ (including ‘knowledge sharing’), and chapter four with the main concept of ‘enabling conditions for knowledge sharing’, as these concepts are understood in this study. The rest of the thesis will refer to this theory and build upon the vocabulary and ideas

presented in chapter two to four. The fifth chapter presents research questions and research method. The findings of the study will be presented and commented in chapter six. Final remarks and recommendations will be given in the last chapter, chapter seven.

**1.2.1 Organization of the thesis:**

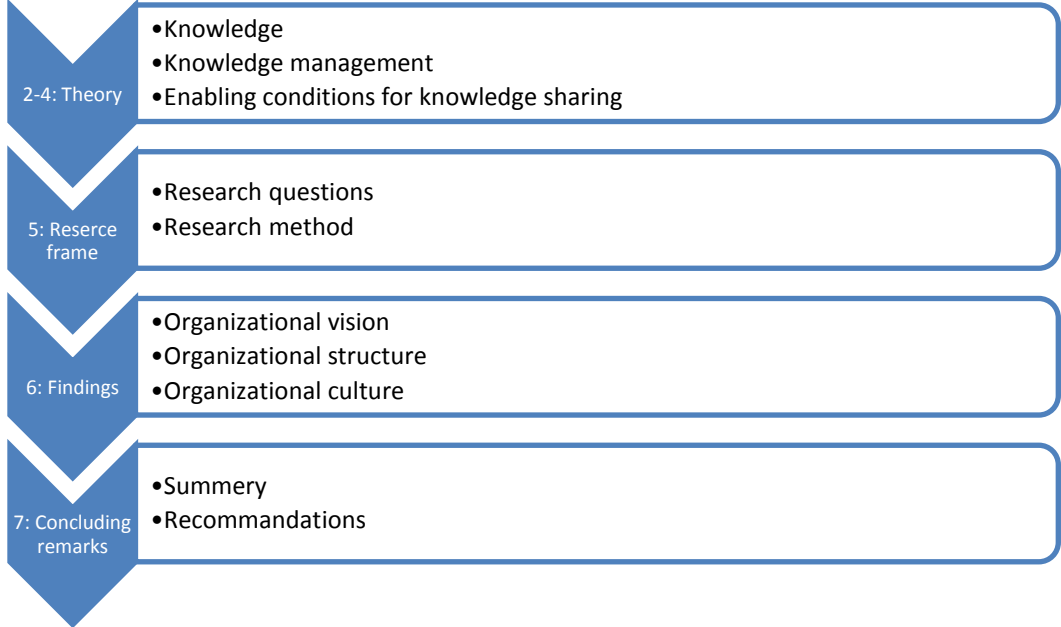


Figure 1: Organization of the thesis

**1.2.2 Organization of the theory in chapter 2-4:**

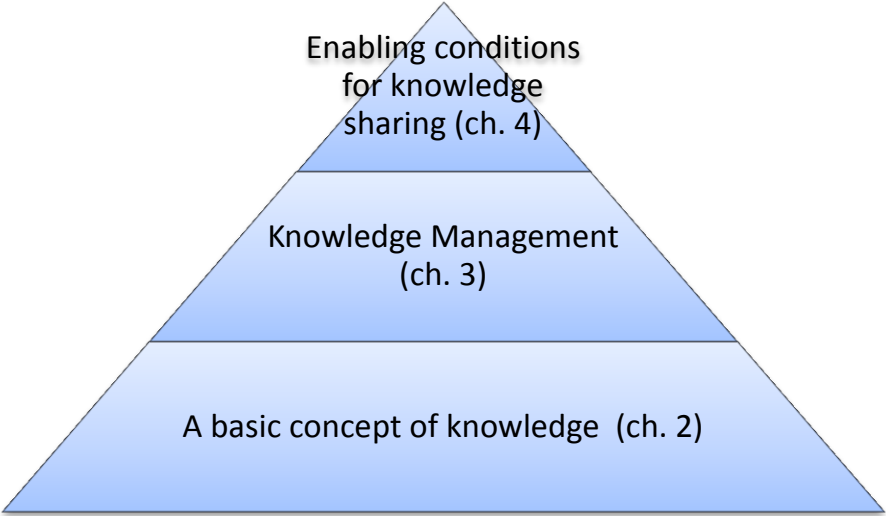


Figure 2: Structure of chapter 2, 3 and 4

# 2.0 Knowledge in organizations

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## 2.0 Knowledge in organizations

In order to identify enabling conditions for knowledge sharing within Aker Solutions in Azerbaijan, the concept of knowledge and knowledge management will now be reviewed from knowledge management literature, creating a basic vocabulary for the discussion that follows later, emphasizing the relational aspects of knowledge and knowledge sharing.

### 2.1 Different categories of knowledge

A well established, often used understanding of knowledge is gained through the two aspects of tacit and explicit knowledge. This paper will also refer to this understanding of knowledge.

*Explicit* knowledge can be codified and understood by a broad audience, whereas “if it cannot be made explicit, it must remain *tacit* (literally ‘silent’), thus difficult, if not impossible to transfer” (Burton-Jones 1999, quoted in Holden, 2002, 68). A book is typically a representation of explicit knowledge. Nonaka and Takeuchi (1995) explains explicit knowledge as that “which can be articulated in formal language including grammatical statements, mathematical expressions, specifications, manuals and so forth [and] thus can be transmitted across individuals formally and easy” (quoted in Holden, 2002, 68-69).

*Tacit* knowledge on the other hand is carried by those individuals who have the knowledge. Nonaka (1994) explains that “tacit knowledge is deeply rooted in action, commitment, and involvement in a specific context” (quoted in Holden, 2002, 68-69). How to fix a certain machine in a factory when it stops is a knowhow carried by those technicians who have worked there for many years and who know the machines very well. Because of its nature, tacit knowledge cannot always easily be transmitted from one person to another.

Nonaka and Takeuchi (1995) further divide tacit knowledge into two dimensions: as action based, technical “know-how” (the gardeners’ “green fingers”) and the more cognitive perception of the world around us that shapes how we interpret the present and future reality. In other words, tacit knowledge is *embodied* and *embrained* knowledge (Blacker, 2004). This tacit, silent knowledge enables people to do things maybe even beyond what they can explain how to do. It is based on experience and deep involvement over time, and as mentioned, it is carried by those individuals who know, and can be hard to transfer to others.

When I speak of knowledge sharing in this paper, my first concern is the sharing of *tacit* knowledge, even though I also use the term ‘knowledge’ including broader meanings of explicit knowledge and sometimes even about the exchange of information. Sharing of knowledge *and* information might be what I am actually describing, although I typically say ‘sharing of knowledge within Aker Solutions’. Maybe my use of the term ‘knowledge’ is best captured by the description given by Davenport and Prusak (1998) when they describe knowledge as:

*(...) a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. (...) In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms (quoted in Holden (2002), 68).*

Knowledge provides the framework for taking in new experiences and information. Without previous ‘knowledge’ of a topic, a person might have difficulties in absorbing new information that he receives, whereas someone with much previous ‘knowledge’ of a topic can absorb much new information in that field. Davenport and Prusak (1998) emphasizes how knowledge gets embedded in organizations in different ways. ‘Embedded knowledge’ is one of the five different categories of knowledge within organizational studies identified by Blacker that I find useful for some aspects of my study (Blacker, 2004, pp. 341 - 342):

1. *Embodied knowledge* is action oriented and is likely to be only partly explicit (know-how), often rooted in specific contexts.
2. *Embrained knowledge* is knowledge that is dependent on conceptual skills and cognitive abilities (knowledge about), what we often think of as abstract knowledge.
3. *Encultured knowledge* refers to the process of achieving shared understandings, closely related to socialization and negotiation within a shared cultural framework.
4. *Encoded knowledge* is information conveyed by signs and symbols such as books, manuals, codes of practice and information technologies in different forms.
5. *Embedded knowledge* is knowledge which resides in systematic routines. It can be seen in the relationship between, for example, technologies, roles, formal procedures, and emergent routines.

Blacker (2004) criticizes the five categories of knowledge to not be realistic, as practical knowledge is more partial, constructed and pragmatic. Concepts like “bodies of knowledge” are not useful, he says, as knowledge constantly changes in the process of being used. He suggests a change from ‘theories of knowledge’ to ‘theories of knowing’.

I disagree with Blacker in that I find the five categories of knowledge useful to some degree. It is meaningful to point out that some knowledge might be embedded in routines and procedures, and also that the culture itself, whether national or organizational culture also carries knowledge (see discussion about culture in chapter 3 and 4). At the same time, categories like those above does not necessarily give a realistic description of organizational learning, as knowledge in an organization is more a dynamic, fluid mix of human activities. I therefore agree with Blacker that the very relational aspect of knowledge and learning must be considered more thoroughly.

In this thesis the relational aspects of knowledge will be emphasized several times and the relational understanding of knowledge is fundamental to the topic of this research, the idea of ‘knowledge sharing’.

## 2.2 Relational aspects of knowledge

Knowledge is often defined as ‘justified true belief’ (Nonaka and Ichijo, 2007). That does not necessarily mean the same as ‘truth’ or ‘facts’. The justified true belief is held by individuals or groups, and they could well be wrong about their perception of reality. Ichijo (2007, 85) notes that “knowledge in an organization is dynamic, relational, and based on human action; it depends on the situation and people involved rather than an absolute truth or hard facts.”

Knowledge can therefore often be rather *subjective* ‘facts’, or at least quite *situated* (contextual) ‘facts’.

Knowledge can now be seen as ‘a complex mix of framed experience, values, contextual information, and expert insight’ situated in a specific context and based on human (relational) action (combining Davenport and Prusak 1998 with Ichijo, 2007). Knowledge is in other words coloured by subjective values and situated in a specific context, thus making it dynamic. This means that while knowledge is in use, it changes or develops, because the context demands a change in the use of previous knowledge and the people involved add their knowledge together into new combinations and expressions. In the moment knowledge is used, it might develop into something new. Because knowledge is relational it is best understood as a part of a social system and social interaction. The very relational aspect of

knowledge and learning makes the conditions for good communication quite important for organizations. What enables good communication (and knowledge sharing), and what hinders such communication?

### **2.3 Knowledge sharing as mediated and situated**

In this paper, I am concerned with knowledge sharing within a transnational company (TNC). As Blacker (2004) points out, I believe that knowledge and learning first of all must be understood by its very relational aspect, where different forms of communication is at the centre of knowledge work. We all know by experience that communication can be enhanced or hindered by the environment or the conditions of the communication situation. The conditions promoting knowledge sharing is of interest for this study, called ‘enabling conditions for knowledge sharing’ (presented in chapter four).

Blacker (2004) focuses on ‘knowing’ rather than ‘knowledge’, trying to overcome the segregation of different forms of knowing listed earlier, in order to create an integrated theory of knowledge work. He wants to analyse “the dynamics of the systems through which knowing is accomplished”. He thinks that knowing is (Blacker, 2004, p. 355):

- (a) Manifest in systems of language, technology, collaboration and control (i.e. it is mediated)
- (b) Located in time and space and specific to particular contexts (i.e. it is situated)
- (c) Constructed and constantly developing (i.e. it is provisional)
- (d) Purpose and object-oriented (i.e. it is pragmatic)

I find this description of the process of knowing very useful for my research, especially (a) and (b) above. Because of the dynamic and relational aspects of knowledge sharing, the process of knowledge sharing should be understood by how it is *mediated* (like in systems of language and technology, collaboration and control) and how it is *situated* in a particular context (like the cross-cultural institutional frameworks of transnational companies).

#### **2.3.1 Knowledge sharing as mediated**

Building on Blacker (2004), I will now say that knowledge (as defined earlier), is mediated through the systems of language, technology, collaboration and control. These activity systems (Engstrom 1989, 1991) are becoming increasingly more interlinked in our age, and therefore more complex. “Detailed ethnographic studies are needed to illuminate the ways in



which people improvise, communicate and negotiate within expanded activity systems.” (Blacker 2004, p. 357) In my words, I want to ask how people are sharing knowledge in today’s complex web of technological and organizational structures. How is knowledge sharing mediated?

### **2.3.2 Knowledge sharing as situated**

The specific local context of knowledge work should be considered more thoroughly, Blacker (2004) suggests. I think that the local context is especially important in cases with obvious cross cultural issues, as clearly relevant for most transnational companies. How does local culture enable or disable knowledge sharing in transnational companies? In order to discuss this question, I will in this thesis look at how knowledge sharing is situated in Baku.

The systems and contexts of knowledge sharing can be regarded as a part of the wider concept of ‘enabling condition’ for knowledge sharing. Different concepts are found to enable knowledge sharing in organizations (Van Krogh et al. 1997, 2000; Alavi and Leidner 2001; Gold et al. 2001; Lin et al. 2002; Choi 2002 and others). The idea of enablers for knowledge sharing is central in this research and I will return to this topic in chapter four. Now I will first continue with a review of ‘knowledge management’ (including cross cultural issues), which makes up the broader framework for knowledge sharing in this study.



# 3.0 Knowledge Management

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## 3.0 Knowledge management

Knowledge work is widely acknowledged to be rising as a key factor in the emerging world economy (Holden 2002). Organizational management must therefore consider knowledge as a central component of the organizations makeup and deal with the barriers and enablers of knowledge creation and knowledge sharing.

## 3.1 Traditional Management

Management of organizations has traditionally been associated with creating procedures and then control if the procedures have been followed through. Corrections of behavior would be implemented if defined procedures were broken.

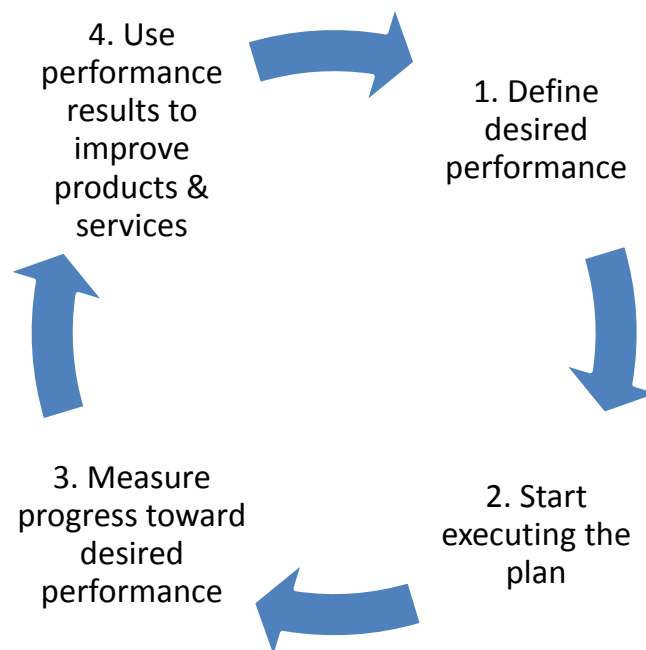


Figure 3: A traditional view of management, created by the author

This process was developed during an era of industrial expansion, where large factories were to be managed. Most of the work was standardized, like on Fords automobile factories, and the repetition of tasks allowed a “scientific approach” to undergird the development of organizational management, as Taylorism advocated.

*Embedded in the philosophy of social Darwinism, Taylorism is the belief that both the preordained natural order and the maximization of profits dictate that the fittest should manage as benevolent dictators and that the rest should work. The former should do the thinking while the latter follow directions; consultations between the two groups are discouraged, since these interactions threaten the authority (if not the bloated paychecks) of the managing class. (Gray, 1993, 371)*

The only ‘knowledge workers’ of that time were the managers who controlled the masses. The idea was that standards of production should be defined, “everything” was to be measured, and managers had a high level of control of the production and of their workers. Unemployment was high, and the relatively easy manual operations in the production allowed managers to fire and hire quickly without too high costs of training new personnel.

In the new economy of today, people and not machinery are the main ‘resource’ in the production. Complex reasoning and innovation are needed for sustained success in the marketplace. Even though technology can be a big part of a firm’s competitive advantage, the people operating and developing this technology are even more important (Holden, 2002).

### **3.2 Knowledge Management**

Managing people during the knowledge economy is not the same job as it was during the industrial revolution. Today jobs are less standardized and not everything can be measured and controlled. People themselves might not want to be controlled, and highly specialized workers could more easily move away if their autonomy seems to be threatened (Kuvaas, 2008). This demands a new approach to organizational management, with an emphasis on human resource management.

*Attracting smart, talented people and raising their level of intellectual capabilities will be a core competence in the new millennium. (Eisenhardt and Santos, 2002)*

With the rise of a knowledge economy (Holden 2002), the literature on knowledge management has expanded rapidly (Leonard 1995; Nonaka and Takeuchi 1995; Prusak 1997; Sveiby 1997; Boisot 1998; Davenport and Prusak 1998; von Krogh, Ichijo, and Nonaka 2000). Knowledge management has been defined as ‘the systematic management of the knowledge processes by which knowledge is identified, gathered, shared and applied’ (Newing, 1999). In other words, it has been recognized that it would be important to identify and gather the firm’s present knowledge to utilize the company’s full capacity. As Bresman et

al. (1999) observes: “Reinventing the wheel, it is argued, is a serious waste of time when the requisite knowledge is already contained in other parts of the organization.”

When knowledge has been identified, it should also be made available throughout the organization and applied in everyday operations. If the work of identifying knowledge does not lead to the application of this knowledge, it would be another waste of time and resources.

Ichijo (2007) includes four main activities in his model of knowledge management: creating knowledge, sharing knowledge, protecting knowledge and discarding (obsolete) knowledge. His model frames my research on knowledge sharing as well, especially the emphasis on ‘enabling conditions’ (see the next chapter called ‘Enabling conditions for knowledge sharing’).

Even though I am focusing on knowledge sharing in this paper, I will now review the main activities in knowledge management as described by Ichijo (2007), to create a framework for knowledge sharing as conceptualized in this paper.

### 3.3 Four main activities of knowledge management

Ichijo (2007) explains that after successfully *creating* knowledge, this new knowledge must be *shared* within the firm, so that energy and resources would not have to go into reinventing the wheel. *Protecting* knowledge would be measures like patenting intellectual property and avoiding articulating sensitive knowledge to the business environment. As a fourth step, when knowledge is outdated, it should gradually be cleaned out of the system, or *discarded* and replaced by the creation of new knowledge in order to stay competitive in a rapid changing economy.

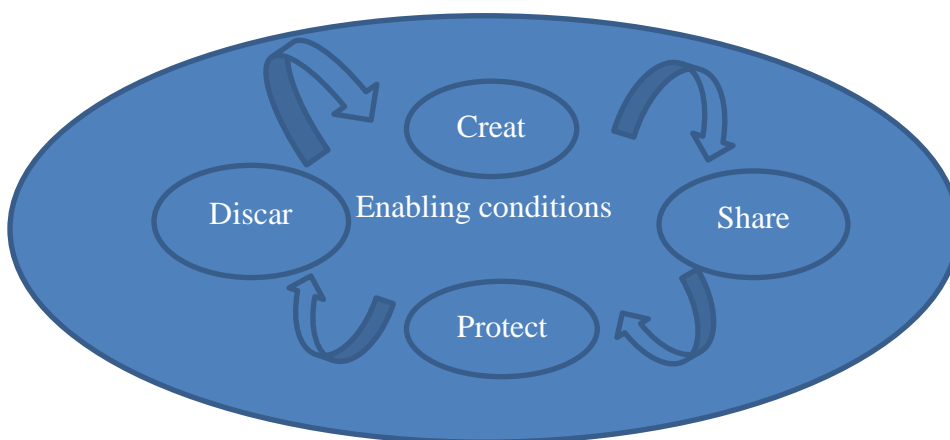


Figure 4: Strategic management of knowledge-based competence of a firm, (Ichijo , 2007, 85)

The management should also look after the overall conditions for this process to occur consistently and systematic. Such *enabling conditions* are therefore central to this model, as it is in my thesis. Now I will describe this process of knowledge management in more details.

**3.3.1 Creating and sharing knowledge**

Nonaka and Takeuchi (1995) are concerned with the creation and conversion of knowledge facilitated by processes of socialization. Tacit knowledge needs to be converted into new tacit knowledge or explicit knowledge in order to be shared throughout an organization. Through this process, new knowledge can be created and if properly managed and internalized this new tacit knowledge could lead to a competitive advantage for the company.

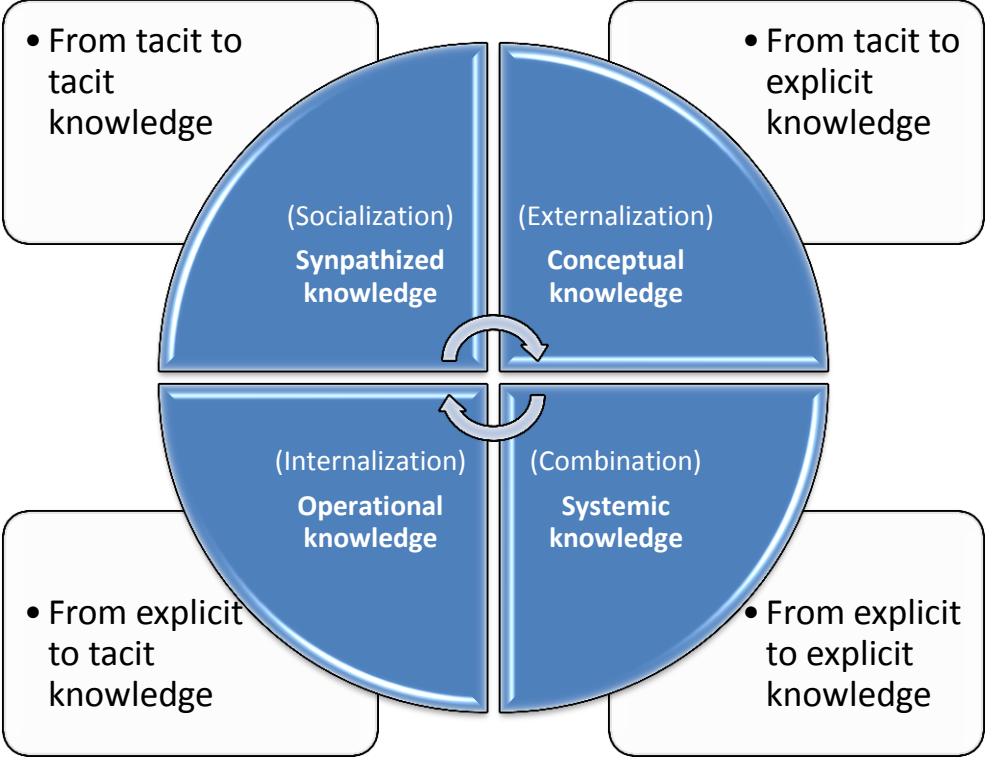


Figure 5: Four modes of knowledge conversion, presented by I. Nonaka and H. Takeuchi (1995)

Tacit knowledge can be exchanged through socialization when people are working together like in practical work-situations. Tacit knowledge can also become explicit by sharing it indirectly through metaphors and analogies. Critics note that the process of sharing tacit knowledge should not be oversimplified, as it is by its very nature not easy to “transfer” or share. But as Nonaka and Takeuchi (1995) mentions, an indirect method of metaphors and analogies might create some shared understanding of tacit knowledge.

Combining explicit knowledge has the potential of creating new knowledge that again can be internalised, making it tacit. These processes take place simultaneously within organizations and in this process new knowledge is created. Innovation is thus a new combination of previous knowledge and can take place at any time in the dialogue between peoples' tacit and explicit knowledge.

### **3.3.2 Protecting knowledge**

In the discussion about knowledge and competitive advantage, creating and sharing new knowledge is found not to be enough to stay ahead of competitors. Only *tacit* knowledge is held to give a firm a sustainable competitive advantage (Burton-Jones, 1999) since when new procedures or technics are internalized, it is hard for competitors to copy that knowledge. Internalizing new knowledge is one way of *protecting* a company's intellectual property and through that gain a competitive advantage in the marketplace. In addition to creating, sharing and protecting knowledge, also discarding obsolete knowledge is suggested to be a part of good knowledge management.

### **3.3.3 Discarding knowledge**

Policies, procedures and technology should gradually to be replaced if they are outdated. Good long-trusted knowledge and experience can become obstacles for new and better ways of thinking about and doing the work. Much knowledge is tacit and hard to remove; therefore unlearning can be a difficult task. Unconscious ways of handling situations like problem solving might need to be changed, but sometimes it is hard to even see how the present situation is, because of own blind spots. By the help of colleges or outside personnel, workers might start to view themselves from the outside. Such "meta- thinking" is necessarily for changing tacit patterns, creating opportunities for double-loop learning (Argyris & Schön, 1996).

Changing procedures or technology could threaten power-structures in the organization, since experts of one field could find themselves outdated when other (younger) coworkers are becoming the new experts of the field. For this reason, the introduction of something new could be resisted by many in the organization. Nevertheless, obsolete knowledge should be replaced by new knowledge for the firm to stay competitive.

### **3.3.4 Enabling conditions**

In this paper I focus on the enabling conditions for knowledge sharing within transnational companies. Enabling conditions for creating and sharing knowledge is central to Ichijo's

model of strategic knowledge management. He suggests that necessary enabling conditions for knowledge management include such aspects as sharing a mission and vision throughout the organization, a unique strategy to attain them, an organizational culture that promotes knowledge creation and sharing, and leadership to initiate building up strong competitiveness (Ichijo 2007). For him, the organizational structures and the organizational culture are two main components of good enabling conditions for knowledge management:

*Effective management of knowledge – that is, creating, sharing, protecting, and discarding knowledge – depends on an enabling context. An enabling context is a shared space that fosters emerging relationships; in it, managers share their tacit and explicit knowledge with their colleagues...The enabling context for knowledge management requires a physical or virtual place and good social relationships among the people involved. In order to share personal knowledge, individuals must rely on others to listen to and react to their ideas...Good social relationships purge a process of distrust, fear, and dissatisfaction, and allow an organizations members to feel safe enough to explore the unknown territories...The essential thing for managers to remember is that all knowledge, as opposed to information or data, depends on an enabling context and good social relationships (p. 85).*

In other words, physical or virtual structures for communication should be in place. IT and procedures for knowledge sharing will be a topic I will review in the next chapter when looking into enabling conditions for knowledge sharing. In addition to good structures, the organizational culture is of fundamental importance for the degree of openness between managers, which in turn decides to which degree knowledge sharing is going to take place.

The idea of enabling conditions informed my questions directed to the employees of Aker Solutions in Baku. I wanted to see if ‘the map’ (the literature) fitted ‘the terrain’ (the reality). In other words, how is knowledge sharing enabled in a Transnational Company like Aker Solutions?

Before I go on to review the literature on enabling conditions for knowledge sharing, I want to dwell on the issue of cross – cultural knowledge management, since the local conditions of Aker Solutions in Norway and Azerbaijan potentially might differ *culturally*, and the knowledge management thus is embedded in an element of cross cultural communication.



### 3.4 Cross – cultural knowledge management

Management literature often pays attention to different aspects of *organizational* culture. But for transnational companies, the corporate culture must often compete with the local contexts in each new country (Getler & Viondrai 2005). The ‘local culture’ in Azerbaijan was reported by expats to contain challenges for western-style knowledge sharing. The concepts underneath knowledge management thinking might be embedded in western traditions and culture to a degree where other ‘cultures’ comes in some kind of conflict with the idea of knowledge sharing and knowledge management. I try in this paper to surface some of the issues in the Azerbaijani culture that might or might not suit the intended corporate culture of Aker Solutions in Baku.

#### 3.4.1 Local culture

‘Local culture’ is a concept that can be used very vague. If we talk of the culture of a nation, the meaning might be that there are certain traits that can be found among most inhabitants of that nation. But one homogenous culture connected to the nation-state is problematic, as individuals within a nation can be part of different ‘cultures’ or ‘sub-cultures’. “The nation state is not the cultural identifier in many cases; people are culturally complex and everyone has an individual profile of cultural inputs.” (Bell, personally communication with Holden, quoted in Holden, 2002, 42).

Also, the idea of “pure” local culture is a romantic idea, but nevertheless not very realistic. The exchange of culture has always been the case, as culture is not fixed, but fluid.

*Local culture is not an uncontaminated space but a field criss-crossed by traces of migrants, travelers, traders, missionaries, colonizers and anthropologists. (Nderveen Pieterse, 2001, p. 64)*

Even though a global exchange of culture has always taken place, we can still point out that local contexts do exist, due to geographical framed institutional regimes like jurisdiction and education. We just need to emphasize that the local context is dynamic and changing, and more of a framework for sensemaking than a simple variable of a society.

*(Culture) must be understood as an active, living phenomenon through which people create and recreate the worlds in which they live. Culture is a lens through which we perceive the world surrounding us; it is sensemaking process, a frame of reference that guides our thoughts and actions. (Olie 1995, quoted in Holden, 2002, 55)*

‘Local context’ is found to be a strong component influencing the ‘organizational culture’ of transnational companies. Geographically defined institutional frameworks might shape the organizational culture, even more than what the corporate culture of transnational firms do (Getler 2003, Christopherson 2002, Getler & Viondrai 2005). Local political and social structures create a backdrop for how effective company – specific procedures and policies can be, and this local context also influences the makeup of the relational proximity of actors in the organization (figure 4).

### **3.4.2 Relational proximity and cross cultural knowledge sharing**

Much literature has focused on the need for physical proximity in order to transfer tacit knowledge, often relevant when explaining the concentration of innovation production found in certain industrial clusters (Maskell and Malmberg 1999; Lundvall and Maskell 2000; Storper and Leamer 2001; Storper and Vanables 2004). But on the contrary, relational proximity has been promoted as more important for knowledge exchange than physical proximity by others (Amin 2000; Amin and Cohendet 2004; Allen 2000, 2002). In one passage of critics, Getler and Vinodrai (2005) explain the idea of relational proximity in this literature:

*In this view, relational proximity is created by common organizational cultures, customs, routines, and conventions that generate the shared understandings that transcend the long distances separating individual branches of the same firm. In other words, the culture and practices of the global firm are strong enough to overcome the friction of local and national cultures and practices. (p. 3)*

Getler and Vinodrai (2005) are critical to the view that says the global firm is strong enough to overcome the friction of local and national cultures and practices. They suggest that the transfer of knowledge (learning) across institutional divides is much more difficult to achieve than is generally acknowledged.

Further they write that what usually takes place is that the organizational culture will be shaped by the local context into some sort of hybrid model or even turning local, pointing to

Abo’s (1994, 1996) research on Japanese transplants into other parts of the world. Differences in labor markets, capital markets, and systems of corporate governance and labor relations has shaped Japanese companies in foreign settings, changing the context of everyday operations from one location to another. Gertler and Vinodrai (2005) also found that geographical defined institutional differences between Germany and USA influenced the extent to which work integration took place. Educational structure, the tradition for and involvement of worker unions and attitudes towards work were among the main institutional differences found between Germany and USA.



Figure 6: How organizational context and local contexts interfere (by the author)

**3.4.3 Cross-cultural challenges**

People in the same place (physical proximity) can be far away from each other relationally (relational proximity). And as Bresman et al. (1999) has commented regarding international acquisitions: the lack of personal relationships, the absence of trust, and ‘cultural distance’ all contributes in creating resistance, frictions, and misunderstandings in cross cultural knowledge sharing.

Communication needs some kind of shared ground to function well. A shared language can be an example of one necessary component of good communication. But good communication is more than words, as culture interferes with the meaning of words and actions; Meaning

changes with the context. Therefore an understanding of the context and culture for each situation is needed for effective communication to take place, and thus cultural competence becomes important. As I now continue to review enabling conditions for knowledge sharing in transnational companies, the underlying understanding should be that local culture and local context must be dealt with at all levels. How to deal with culture and context is one of the questions that will be relevant throughout this study.

# 4.0 Enabling conditions for sharing knowledge in organizations

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## 4.0 Enabling conditions for knowledge sharing

I have now arrived at the main theoretical framework for this research, after having laid the foundations with concepts of knowledge and knowledge management. From the broad picture of knowledge management, I now move into the details of describing different enabling conditions for knowledge sharing. This chapter is meant to create a point of reference for gathering and analyzing the empirical data of knowledge enablers within Aker Solutions.

A whole range of literature is dealing with ‘enablers’ for knowledge sharing in organizations (Van Krogh et al. 1997, 2000; Alavi and Leidner 2001; Gold et al. 2001; Lin et al. 2002; Choi 2002 and others). The quest is to find a relationship between aspects connected to the organization that leads to or *enables* effective knowledge sharing. What makes the process of sharing knowledge easier or even speeds up the process? The overview of some of the literature provided by Al-Gharibeh (2011) (table 1) shows that culture, structure, people and information technology are among the enablers most often pointed.

## 4.1 Creating enabling conditions for knowledge sharing

I will in this chapter review some of the enablers mentioned in the literature on the list of Al-Gharibeh (2011). I have ordered the enablers into three different categories of ‘enabling conditions’ for better overview and a logic connection with my research questions. Building on the writings of Von Krogh et al. (2000), cited in Ichijo (2007, 86), necessary enabling conditions for knowledge management could include such aspects as (1) sharing a mission and vision throughout the organization and (2) creating an organizational structure as well as (3) an organizational culture that promotes knowledge creation and sharing. I will now explain these aspects further, but just mentioning before I go on, that my research questions are ordered in the same way, focusing on (1) how the process of knowledge sharing is integrated into the company vision, (2) mediated through organizational structures and (3) situated in the local culture within Aker Solutions, Baku.

The ‘enabling conditions’ that should be created for knowledge sharing are described in this chapter in the following order:

- Creating a knowledge vision promoting knowledge sharing
- Creating an organizational structure for knowledge sharing
  - Knowledge sharing and information technology
  - Knowledge sharing and conversations
  - Knowledge sharing and knowledge activists
  - Knowledge sharing and training
- Crating an organizational culture promoting knowledge sharing

**Table 1: Knowledge enablers by different authors presented by Al-Gharibeh (2011)**

Authors	Knowledge enabler
Von Krogh et al, (1997)	Knowledge activists
Pan and Scarborough (1998)	Culture, Structure, Technology
Von Krogh, et al. (2000)	Knowledge Vision, Manage Conversations, Mobilize Knowledge Activists, Create the right context and Globalize Local Knowledge
Alavi and Leidner (2001)	Culture, Organizational Incentive, IT
Gold et al. (2002)	Culture, Structure, Technology
Lin et al. (2002)	Cultural, Organizational, Technological, HR
Choi (2002)	Culture, Structure, People, IT
Lee and Choi (2003)	Collaboration, Trust, Learning, Centralization, T-shaped skill, Formalization, IT
Smith and McKeen (2003)	Social, Organizational, Managerial, Technological
Strohmaier (2003)	Organizational, Technological System, People
Muller et al. (2005)	Culture, Incentive
Kim and Lee (2006)	Organizational Culture, Structure, IT
Hilmi Aulawi et al. (2009)	Culture, Structure, People, IT

## 4.2 Creating a knowledge vision promoting knowledge sharing

The vision and support of the top management for knowledge sharing is important (Connelly and Kelloway, 2003; MacNeil 2004; Lin, 2006; 2007) in order to create enabling conditions for knowledge sharing:

*An organization's members should have a clear idea of what knowledge must be shared and with whom specific knowledge must be shared across functions, businesses and region. (Ichijo 2007 p.87)*

A knowledge vision points to the direction of knowledge creation and also indicates guidelines for knowledge sharing (Ichijo 2007). Among those guidelines indicated there should be criteria for good communication verbalized (See '4.4 Creating an organizational culture promoting knowledge sharing').

The knowledge vision keeps the employees always aware of what the purpose of the organization is. In 1998, Katsuhiko Machida, the new president of Sharp Corporation, announced his aim of "replacing all the televisions sold with the LCD televisions by 2005." This can be seen as Sharp's 'knowledge vision' (Von Krogh et al., 2000). People at Sharp could act according to this vision, and they did. "Within five years, Sharp became the number-one manufacturer of LCD television sets worldwide." (Ichijo, 2007, p.86) The knowledge vision led to a competitive advantage.

Referring to this example, I will continue on with the idea that with a strong knowledge vision as foundation, organizational structure and culture could be aligned with that vision and create enabling conditions for knowledge sharing companies that in the long run could develop significant competitive advantages out of well performed knowledge management (Ichijo 2007).

### 4.3 Creating an organizational structure for knowledge sharing

Building on Blacker's (2004) ideas, as explained in the first chapter about 'knowledge in organizations', I suggested that knowledge sharing is mediated through the systems of language, technology, collaboration and control. Now I will go deeper in defining these systems as information technology, conversations, knowledge activists and different modes of training for knowledge sharing. The writing is ordered by this structure:

- Knowledge sharing and information technology
- Knowledge sharing and conversations
- Knowledge sharing and knowledge activists
- Knowledge sharing and training

#### 4.3.1 Knowledge sharing and information technology

Information and communication technology (ICT) shows great opportunities for facilitating knowledge sharing (Pan and Leidner, 2003; Huysman and Wulf, 2006). Different ICT systems can become enablers for knowledge sharing, if used with wisdom, among them are databases, technology integrated in the work process and social media.

But to set up different information and communication technology (ICT) systems and hope employees will use them for sharing knowledge is not necessary sufficient.

*Fascination with information technology often tends to make it an end in itself, and thereby blur its purpose – to be an enabler of knowledge creation (Von Krogh, et al., 1997).*

Employees might need some kind of motivation for doing the extra work of sharing with coworkers. Maybe they need to be given time for contributing on the intranet, and some might need to be educated in how to use the technology for knowledge sharing.

Lin (2007) says that 'reliance on a techno-centric approach to knowledge sharing is insufficient for achieving the necessary social relationships and interpersonal interactions of employees for facilitating employee willingness to donate knowledge.'

As I already have mentioned, local culture and organizational culture affects knowledge sharing as well, not at least knowledge sharing through information technology. Developing a



culture for knowledge sharing is fundamental for successful use of IT. With this in mind, I will now describe some examples of information technology in organizations today.

### **Databases**

Knowledge repositories serve as places to store and search for a whole range of different information and knowledge. It might be time-consuming to use and contribute to databases, especially when some repositories become large and unstructured (Davenport 2007).

Davenport (2007) suggests that databases are best suited for consulting type of work, where it is not easy to predict on forehand what kind of knowledge is needed, and the job is much unstructured. Databases are also good for reuse of knowledge, with drawings, plans and reports from previous work available in the planning process of new jobs. ‘Yellow pages’ containing information about ‘who is who’ in the company can be a valuable source for finding people to consult on various issues.

### **Work-integrated technology**

Instead of having information and knowledge stored on databases needing sometimes tireless searching to be found, new technology is trying to introduce knowledge ‘just-in-time’, popping up on the screen during work when it is relevant to the tasks being performed.

Davenport (2007) reports that when a physician in Partners HealthCare in Boston is typing data about a client like prescribing drugs or referring a patient to another physician, the system can intervene and may suggest other actions or point to problems with the patient’s combination of drugs and give other recommendations. The potential time saved through this process could be huge, if more and more modules are built into the system. At the same time, an expert needs to handle this process, as critical thinking is also needed for ensuring that procedures are correct. Not at least experts must design the system, and it is a hard job as well with not much off-the-shelves software developed in the market yet.

### **Social media**

Scarff (2006) reports how IBM, Motorola and Siemens are using ‘blogs’, ‘wikis’ and ‘Frequent Asked Questions’ (FAQ’s) in their internal communication (See explanations in table 2). These social media can be used behind the firewall of the company, creating a safe place for communication between coworkers, although new rules might have to be created for these new media. Not everyone is enthusiastic about the supposedly advantages of social media. Davenport (2007) doubts whether social media like blogs contributes to the

productivity of firms. “Perhaps the biggest problem for blogging is the time it takes to write and read blogs. If anything, this tool has detracted from productivity, not increased it.” (p.108)

**Table 2: Different tools in social media presented by Scarff (2006)**

### FAQ's

Frequently asked questions (FAQ's) lists can be put together from activities on forums and blogs as useful references for staff, sales teams or custom service representatives.

### Wiki's

A wiki is a shared online medium that everyone can update, a kind of database with different topics that can be updated regularly with new knowledge and information. Some rules may have to be made regarding how to handle disagreements about the content.

### Blogs

Blogs are written usually by one or a few persons who might be specialists in their field. The posts are sequential in date order, and can open up for comments by the readers. It differs from forums in that you cannot create your own sub-categories, and it is more organized in its structure (easier to read).

### 4.3.2 Knowledge sharing and conversations

Communication is a key activity in organizations, and facilitating good communication is essential for knowledge creation and sharing. Managing formal and informal meetings can be strategies for managing conversations.

#### Knowledge shared in meetings

Verbal communication contains knowledge that could come across in conversations between two people or a group of people. Nonaka (1991) suggests that figurative language and metaphors are best suited for converting tacit knowledge into explicit knowledge. In meetings between coworkers or with customers, valuable knowledge about a product, a procedure or people can be shared. Meetings can be categorized as formal or informal, ‘fixed’ or ‘open’.

Table 3: Different types of meetings (by the author)

Type of meeting	Fixed	Open
Formal	A scheduled meeting with a fixed agenda	A scheduled meeting with an open agenda
Informal	Coworkers discussing/solving a specific problem	Coworkers chatting about topics related to the work

#### Formal meetings

A part of organizational work is to conduct meetings in order to bring together different departments and people for exchanging information and making plans for the future. In such meetings information and knowledge can be shared for example in presentations and conversations. Customers and suppliers could be important actors to learn from as well, as they have experiences of products and procedures outside of the organization.

#### Informal meetings

Much attention has been given to informal knowledge sharing “by the water cooler” (Bailey and Leland, 2006; Grebow, 2002; Waring and Bishop 2009). Less managed and more situated activities create opportunities for learning where socialization and participation are central concepts for the knowledge sharing. These informal opportunities for learning might otherwise be hard to orchestrate, but are made possible because people work side-by-side over time and start to share each other’s worldview, values and language (McPherson et al., 2001; Tagliaventi and Matteredelli, 2006). Sometimes discussions that could be difficult to bring up in formal settings, due to sensitive questions about practices or persons, colleagues with

mutual trust and understanding get the opportunity to deal with these issues informally “by the water cooler”, as just mentioned, or behind closed office doors (Waring and Bishop 2009):

*Although often associated with ‘office gossip’, these semi-private and casual situations constitute a potent vehicle for knowledge sharing, learning and the maintenance of organizational and occupational values based upon privacy, trust and mutual understanding. (Waring and Bishop 2009, p. 326)*

Managing conversations does not mean to schedule meetings by the water cooler, or to insist on having a referent from such meetings. But one could ask how such opportunities could enhance the work of the organization, and at least facilitate and encourage such informal problem solving to take place. Some have responded by creating open landscapes in the office in order to spur more ad hoc conversations.

### **4.3.3 Knowledge sharing and knowledge activists**

The formal and informal meetings can be fruitful, but in a way they are limited by the structures of daily operations and organizational frameworks. You would normally meet the same coworkers and suppliers due to the organizational and geographical distances mentioned in chapter 2. Von Krogh, Nonaka and Ichijo (1997) advocate the use of ‘knowledge activists’ as knowledge enablers in order to overcome these distances. This person, group or department acts “as a catalyst of knowledge creation, as a connector of knowledge creation initiatives and as a merchant of foresight” (p.475):

*Travelling freely around in the company, talking to organizational members across organizational boundaries and levels, he is exposed to a variety of new data, ideas, insights, opportunities, questions, issues, and problems. (p. 476)*

With this insight, the knowledge activist then works to create a *space*, or context for knowledge creation, facilitating creative explorations of *why, how, who* and *what*. In some companies, the R&D department would fill this activist role and try to create innovation processes throughout the organization. In other cases, one person or a group of people can be given the assignment to catalyze and connect knowledge creating and sharing initiatives.

I find this concept very appealing, because I believe mobility is a key to overcome barriers to knowledge sharing. Building trust and connection across boundaries could possibly open up new opportunities for knowledge creation and knowledge sharing.

#### **4.3.4 Knowledge sharing and training**

In my opinion, isolation is one of the main barriers to growth and development of a local organization. Being connected to a larger, international body would be fruitful for even daily operations in local offices. I think that learning from and with knowledge activists, can make a local office overcome destructive ‘isolation’ in the global economy.

In addition, more traditional ways of transferring knowledge could be tried out. Seminars and courses designed for learning of specific practices or procedures could transfer knowledge within the company. Learning how to use some equipment or tools would be a natural training activity in technical companies. Even though formal classroom training or online courses can ensure some learning, a practical on the job training gives opportunities for sharing experience and knowledge in a more organic and natural flow. These learning opportunities might prove to be much as effective in knowledge sharing as ‘artificial’ situations created in the classroom, as more tacit aspects of knowledge can be shared during times of working together (Nonaka 1994).

Ichijo (2007) calls for ‘action learning’ in order to globalize knowledge in transnational companies. The idea is to gather soon-to-be top managers to interact with top management and each other in actual problem solving, providing a context for knowledge management, learning and friendship-building across geographical regions and business functions. This is also seen as a way of developing leaders with high relation-building competencies, which according to Ichijo (2007) is a critical leadership competence in the current global economy.

#### **4.3.5 Concluding remarks about structures for knowledge sharing**

The systems of information technology, conversations, knowledge activist and training discussed here could all contribute to creating a structure for knowledge sharing. This structure would be a part of the enabling conditions for knowledge sharing in companies.

I find it useful to categorize different enablers as parts of either ‘the structure’ or ‘the culture’ of knowledge sharing. I build upon the idea that knowledge sharing is mediated in the structures and situated in the local culture (inspired by Blacker, 2004, as discussed in chapter 2). Creating an organizational structure and an organizational culture are both important for knowledge sharing. I will now continue this discussion focusing on organizational culture.

## **4.4 Creating an organizational culture promoting knowledge sharing**

The third element in the theoretical framework of this thesis, in addition to a knowledge vision and organizational structure for knowledge sharing, is the issue of organizational culture related to knowledge sharing. As discussed earlier, corporate culture and local culture interferes, and the local culture is often a stronger component in defining the organizational culture locally (See chapter 2 and 3).

How knowledge sharing is situated is therefore one of the main questions in this research, and I will shortly review some issues regarding organizational culture before I give an overview of the research questions in the next chapter.

Davenport and Prusak (1998) claims that a system of knowledge management is in need of a corporate culture that supports it in order to be efficient. Aspects of organizational culture enabling knowledge sharing are suggested to be trust, collaboration, opportunity for learning and degree of centralization (Lee and Choi 2003) among others.

### **4.4.1 Trust and collaboration**

Trust is a foundational concept in all communication, and without trust, it is hard to engage in any meaningful long term exchange of ideas and knowledge. This concept is also related to collaboration – the degree of active support and help in an organization. Collaboration like teamwork or active support from coworkers can help the process of socialization, externalization and internalization (Lee and Choi 2003) that are three of the four modes of knowledge conversion presented in chapter 3. Discussing problems with others might bring up solutions that each person alone cannot create, because knowledge is a dynamic concept that changes in the dialogue between people. Nonaka (1995) suggests that new knowledge can be created when people share their thoughts and experiences in open dialogues. Openness and trust will be one of the central issues when researching the local culture in Baku.

### **4.4.2 Opportunities for learning**

Lee and Choi (2003) measured the degree of opportunity, variety, satisfaction and encouragement for learning and development in organizations related to Nonakas (1995) four modes of knowledge sharing (see chapter 3), and found that opportunities for learning had a positive relation to socialization and internalization which is connected with transfer of tacit knowledge.

Transnational companies have the advantage of creating learning resources that can be shared throughout the company, as well as getting contributions to this pool of resources from different locations. Every location can create learning resources that other locations can utilize. The main office can also put together courses with participants from different locations and thus be able to run training that each location alone could not afford. By sending workers to other locations, the company can provide effective cross cultural learning for both new and old employees.

#### **4.4.3 Degree of centralization**

The degree of authority and control over decisions is found to be negatively related to socialization, externalization and internalization, but not related to combination (Lee and Choi 2003). In other words, a bureaucratic culture with much standardized work does not seem to encourage knowledge creation and sharing. In some cultures centralization is a normal way of organizing a workplace, with much control in the hands of a few on the top.

Stensheim (work in progress) reports how a Norwegian project manager involved in a merger with a German company discovers different traditions of decision-making, related to hierarchy and degree of centralization:

*As project manager, I am the one in charge, but we decide in plenum how to proceed with a task. I know where we are going, but I also know that there are many ways to get there! Even though we discuss in plenum, we have a defined goal, whereas they [the Germans] talk of their contributions to the project one by one, and then wait for the project manager to make a decision. (Stensheim, work in progress, p. 14)*

Nilsen's (2006) studied a Norwegian company that established a branch in Canada. Nilsen links the Norwegian social-democratic ideal to high levels of collectivism, claiming that group values are ranked higher than individual values in Norway. I reason along these lines that consensus and team efforts are thus preferred over authoritative individuals making decisions on the top. Democracy and equality might be concepts describing a 'Norwegian organizational culture'. The ideal might not be a boss far distanced from the other employees, but rather a more 'flat' structure. If this is the case I would say that this culture in many ways could be well suited for knowledge sharing and innovation.





# 5.0 Research questions and method

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## 5.1 Research questions

Based on the theory reviewed above, this study presents enabling conditions for knowledge sharing within Aker Solutions in Baku, and between Aker Solutions Baku and Aker Solutions in other locations. Informed by the literature, I recognize that (1) a knowledge vision and knowledge strategy is of a fundamental issue for other aspects of knowledge management (Von Krogh et al., 2000; Ichijo, 2007). Further, I recognize that (2) structures for knowledge sharing are important (how knowledge sharing is *mediated*) (Blacker, 2004). I also recognize that (3) the influence of the local context on knowledge sharing should get attention (how knowledge sharing is *situated*) (Blacker, 2004), especially when dealing with cross cultural knowledge management, as in this case with Aker Solutions.

My main goal is to identify enabling conditions for knowledge sharing within the company as described by the literature in chapter four, and secondly to discuss some implications of the findings. Inspired by Ichijo (2007) and Blacker (2004) I am asking how knowledge sharing within Aker Solutions in Baku is integrated into the knowledge vision and strategy, how knowledge sharing is mediated (manifested in systems of language, technology, collaboration and control) and how knowledge sharing is situated (located in time and space and specific to particular contexts).

### 5.1.1 How is knowledge sharing integrated into the vision and strategy?

This first question is as mentioned fundamental for the knowledge work in Aker Solutions (or any company). A vision, as explained in the chapter ‘Enabling conditions for knowledge sharing’, drives the organization in a fundamental direction. If the vision and strategy is going to enable knowledge sharing, the process of knowledge sharing must be integrated in the vision and the strategy. Therefore I find it relevant to ask how knowledge sharing is integrated into the vision and strategy of Aker Solutions, Baku.

- (1) How is knowledge sharing integrated into the knowledge vision and strategy of Aker Solutions, Baku?

### 5.1.2 How is knowledge sharing mediated?

I assume there is a knowledge vision of Aker Solutions. I further assume there are certain enabling conditions in place for mediating knowledge sharing, and that some of these conditions can be identified and described. In order to get enabling conditions ‘to the surface’ I ask *how* knowledge sharing is mediated within Aker Solutions, both locally and with other locations internationally.

- (2) How is knowledge sharing mediated within Aker Solutions Baku and between Aker Solutions Baku and Aker Solutions elsewhere?

### 5.1.3 How is knowledge sharing situated?

The wider context of the knowledge sharing process is also of interest. As reviewed from the literature, one important goal in knowledge management would be to create an enabling context for knowledge sharing (Von Krogh et al., 2000; Ichijo, 2007). This goal has been highlighted as critical by several studies on enablers for knowledge management. But as discussed in the theory chapter, any attempt to mold the corporate culture comes up against concepts embedded in the local context, such as systems of corporate governance and educational systems (Abo 1994, 1996; Gertler and Vinodrai, 2005). With the understanding that the local context might work for or against the intended or original corporate culture, I am asking how the particular context in Baku suits the (Norwegian/European) process of knowledge sharing within Aker Solutions in Baku and between Aker Solutions in Baku and other locations internationally.

- (3) How does the particular context in Baku suit knowledge sharing within Aker Solutions Baku and between Aker Solutions Baku and Aker Solutions elsewhere?

## 5.2 Research method

Wright (1996) suggests that qualitative research offers answers to the complex issues that are typical for international management research. Nevertheless, Hansen (2008) comments that qualitative approaches are still greatly underrepresented in international business research, merely accounting for about ten percent of the published work (Andersen and Skaates, 2004).

By using a questionnaire to survey a sample of the population, statistically significant generalizations can be made through a quantitative study. But the questionnaire can miss out important nuances and information because of its standardized format. And besides, for revealing deeper cause and effect issues, the explanatory power of questionnaires can be limited (Valentine, 2005). One might need 'mixed methods' with qualitative elements added into the research in order to crack into deeper causes of some phenomena.

According to Holstein and Gubrium (1997) qualitative inquiry is especially sensitive to representational matters, and individual interviews are the most used data collection strategy in qualitative research (Sandelowski 2002, Nunkoosing 2005). A semi structured interview opens up for conversations around themes that have been prepared by the researcher in advance, and can get to the surface issues that not immediately is visible (Valentine, 2005).

I chose a semi structured interview as method for my research in Baku. The main reason was that the questions I would raise were better suited to be used for discussions and reflections with the interviewees than to be coupled with predefined answers or scales on a questionnaire. And besides, I would research with a small number of people anyway, so quantifying the answers would not be very useful.

In the process, I interviewed a *group* of five Norwegian managers. This situation came close to become a 'focus group' although not fully so. A 'focus group' is basically a group of people assembled "to discuss and comment on, from personal experience, the topic that is the subject of the research" (Powell *et al.* 1996: 499) The group interview arose mainly for pragmatic reasons, as I could not enter their work site unrestricted (more explanations comes later). In that sense, I was not setting up 'a focus group' as defined by methodical definitions. Still, some of the focus group dynamics could be found during the interview.

Groups do have some limitations, as they do not allow each participants perspective come through equally. Some of the members will contribute more than others, for different reasons (Conradson 2005). At the same time, a group setting can have advantages that individual

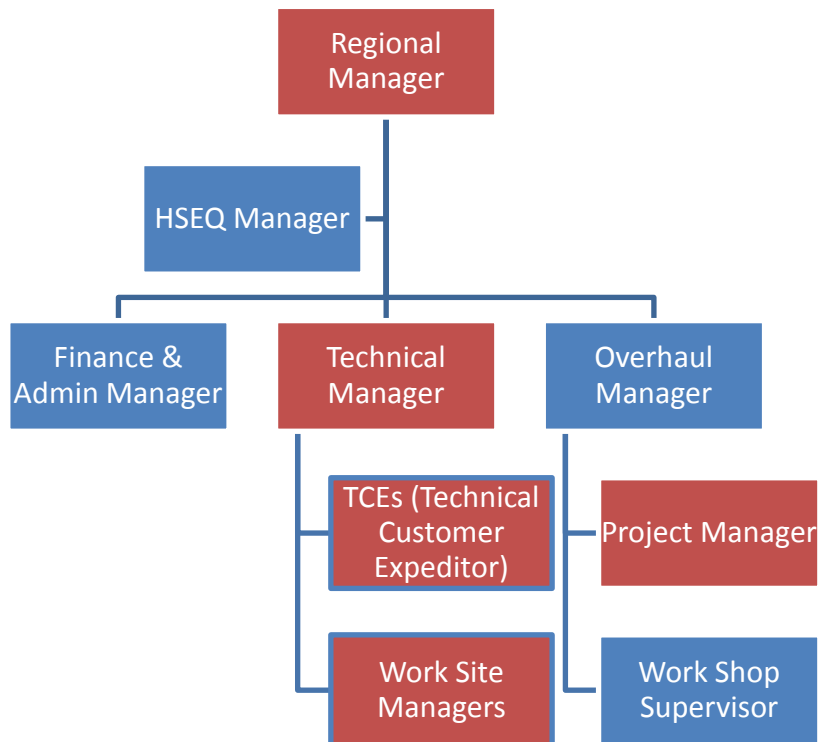
interviews don't have. According to Cook and Crang (1995: 56), "a [focus] group is not just a way of collecting individual statements, but rather a means to set up a negotiation of meanings through intra- and inter-personal debates". In the group interview, my goal was to get different views and aspects of the topic highlighted, by letting the group comment on each other's input. Some limitations arose to reach that goal, as discussed later, but most aspects of the group interview were fruitful.

### 5.2.1 The interviews

Eleven in – depth semi structured interviews (Valentine, 2005) were conducted in Baku during a period of two months in the spring of 2012. At the head office six persons (two Azeri, two Norwegians and two Englishmen) were interviewed for about one hour each. From 'the work site', an interview with five Norwegian managers was done as a group interview (Conradson, 2005).

The interviewees are described in the findings with their nationality and title like "manager" or "TCE" (Technical Customer Expeditor) with a number to separate those with the same title, like the Norwegian work site managers. I call them "Norwegian work site manager 1-5". The regional manager is British, as well as one of the TCEs. The two other TCEs are Norwegians, and the technical manager and the project manager are Azerbaijanis. The organizational chart will provide an overview, even if the whole organization is not included, but only those relevant to the study. The Norwegian work site managers form their own project organization, written into the chart under the technical manager. In one way they operate 'on their own' even if they are in close contact and collaboration with the head office. I don't know exactly how they should be placed in relation to the head office, but I think the picture presented here should be clear enough to understand the findings presented in this research.

In addition to employees at Aker Solutions, I spoke with a Norwegian (he)- /British (she) couple who had lived in Azerbaijan the last 15 years, and also with a Norwegian teacher who had worked one year at the Azerbaijani University of Languages in order to hear their opinions about the culture and compare with my findings at Aker Solutions. The logic was that expats living long time in the country, as well as working in different part of the society might contribute with valuable insight to the study, in a way checking the reliability of the findings.



**Figure 7: Organizational chart for Aker Solutions in Baku, based on an original chart from the head office in Baku. The interviewees are in red.**

All the data was recorded on an mp3-player and transcribed after the interview (except for the last part of the group interview, which was written down after the interview due to technical failure by the mp3-player. Likewise the conversations with the humanitarian worker and the teacher, which was more informal talks, was not recorded). All the Norwegians spoke in Norwegian, so I translated their comments before they were used in the research. Each interview did not follow exactly the same track, but I was guided by a list of topics that I wanted to cover during the interviews. Central themes were:

- Strategies for knowledge sharing
- Processes for knowledge transfer within the company
- Descriptions of and comments about “the local culture”
- Potential challenges between local and expat culture
- The use of IT
- Different kinds of training of employees

Questions about culture aimed to reveal barriers to and opportunities for knowledge sharing within the local culture. By asking how the managers solved problems on the job, I wanted to see what strategies were in use for getting hold of needed knowledge. I also wanted to hear

their views of what kind of support they got from the head office back in Norway, painting a picture of exchange of knowledge between Norway and Azerbaijan. One question was also directly about how knowledge has been shared or transferred between Norway and Azerbaijan. Several fruitful answers came from these questions.

The interviews one by one went well, but some of the respondents might have felt awkward to share freely because they might have been unsure about the use of their comments. I explained that I would not use names, and not extensive quotes, but I understand that the level of trust could still have been too low for open expressions on all topics as it probably will be easy for people in the organization to guess who said what.

The five Norwegian managers were all men (like the rest of my informants in the head office), and they had been in the country for different length of time. Two of them lived in Baku, and three stayed for four weeks and went home four weeks in rotation. Two of them came first time less than one year ago. They had different educational backgrounds, some in electric engineering, and others with software or other technical work.

Conducting a group interview gave both opportunities and some challenges. The respondents could inspire each other by their stories to share more than I could have asked them to share. At the same time, some of them were more active than the others, giving me the impression that I might have had more quantity of data from interviewing them one by one (Conradson 2005). Having said that, I feel that what they added to each other's stories nearly exhausted the potential qualitatively material I could have got otherwise. Still, possibly, some material might have been lost because of the group situation, where not all seemed to feel the same freedom to share when the others were there.

### **5.2.2 Recruiting interviewees**

Through the head office of Aker Solutions in Norway I was put in contact with the head office in Baku, and generously welcomed there by the regional manager to conduct interviews and have a desk-space for my writing. The regional manager became the 'gatekeeper' that had "the power to grant or withhold access to people or situations for the purpose of research" (Burgess, 1984: 48). With his introduction, I was given open access to all the employees to conduct interviews.

In Baku I found that the organization was split in three physically separate locations, with the administration at one place, a mechanical workshop another place, and several people working on the site of a customer.

My goal was to interview both expat and locals at the head office. I reasoned that the head office spent most time communication with Norway and had more overview of different kinds of knowledge sharing going on within the company, compared with the local mechanical workers at the work shop or on site for customer. By interviewing both locals and expats, I might get different perspectives, at least on cross cultural issues.

Accessing the work shop or work site was restricted for security reasons, and besides, if interviewing local workers there, I probably would have to need some kind of interpreter, as not all local mechanical workers are well familiar with English. I would also have to organize meetings after working time, or obtain approval from the customer if going to the work site, in addition to completing a security course for entering the site. I found it too much hassle for my timeframe to go beyond the people I could access from the head office.

Later I discovered that five Norwegians led different parts of the work on the work site, and I included them in my research as well. A problem arose when I wanted to conduct interviews with the Norwegians from the work site, as access to the site was restricted, and besides, the customers of Aker Solutions would not be too happy if they found the people they had rented doing other things than agreed upon. The solution was to meet with these five Norwegians outside of work, conducting a group interview with them on a Saturday. In other words, the arrangement with the group interview arose mainly for pragmatic reasons.

At one point I saw the opportunity to collect interviews among managers in British Petroleum in Baku as well. Because of the time-frame, it was probably fine that this did not work out. However, it would have been interesting to compare a Norwegian and a British organization at the same location and in the same industry. Also knowing the work BP has put into IT solutions for knowledge management, it would have been interesting to hear their experience from the flow of knowledge between Azerbaijan and Britain.

Another opportunity that could have supported the study was my trip to Kazakhstan during my time in Baku. In Kazakhstan, Aker Solutions have another office with quite many experiences from that context. When I was there I heard that they had just lost a major contract by the Caspian Sea, and it could have been interesting to hear their viewpoints from

the same region of Central Asia. Lost opportunities can be saved for another time, and maybe others can follow up this paper by expanding to other locations by the Caspian Sea or to other companies in Baku.

### 5.2.3 Cross cultural research?

Even though I have been interested in cross cultural issues in this research, my *research* is not all cross cultural. One might argue that me, a student of geography researching engineers and managers in one way is cross cultural research in the sense that they belong to another sub culture than I. In that sense most research is cross cultural. But I mean crossing cultural borders in a broader sense, like crossing ethnically and linguistically differences.

First of all, my data was mostly collected from expats; Two British managers (one who had lived several years in Norway), and seven Norwegian employees. Only two local employees were interviewed, mainly due to the relatively high number of expats in the head office. Because of 80 % of the interviews were with Norwegians/Englishmen, I would say that my research is not much *cross cultural* per se.

Secondly, the comments the expats gave on cross cultural issues must be said to be from ‘outsiders’ perspective compared with what locals would say (although their other observations about knowledge sharing within Aker Solutions are from ‘insiders’ view). In this sense, my findings are only to a low degree reflecting more than one side of the cultural actors. Most (if not all) voice about the Azeri culture has been given to expats. They might be quite right about several observations, but they might wrong when it comes to their explanations of and reasons for the different observations of the Azeri culture.

What could make my data reliable is that I have interviewed expats from Aker Solutions living in the country for a while, some of them for more than six year, and one even married to a local. In addition, I have spoken with two expats who have lived here for 15 years to check my results with their opinions. The check showed that my interviewees were quite well informed about the culture, as perceived by those ‘veterans’ and this strengthened my findings. Some literature from the area confirms some of the observations, especially about cultural inheritance from the soviet area (Burkhalter and Shegebayev, 2012)

Hansen (2008) calls for more integration of international and local perspectives to understand the internationalization process taking place when a firm goes abroad or when foreign firms comes into the local environment. I did not fully live up to that standard.



#### 5.2.4 Reflections on the collection of data

In the autumn of 2011 I spent three months in another city of Azerbaijan, working as an internship in a microfinance bank. The work involved corporation with the local staff and the British director. This experience probably influenced both what types of questions I made (and did not make), my influence upon the interviews and my interpretation of the answers given. I got a head start in learning about issues in the local culture in connection with a western organizational and management style. I became aware of some of the issues with cross cultural knowledge sharing between Norway/Britain and Azerbaijan. But I might also have picked up some negative feelings and stereotypes about the culture from my experience and from stories told by other expats I encountered during my internship.

My plumb line in preparing for the interviews was not only my own experiences though, as topics from the management literature informed my questioning as well. Now, much of the literature has come out of a western perspective, even though one might say that the Japanese contributions are not all western. Still, the topics discussed in much of the literature might be less relevant in the Central Asian/Caucasus context. One of the issues here is the heritage from the Soviet Union, and partly also the influence of Islam. Being a secular country after the model of Turkey, religion did not seem on the surface as a big issue in Baku, but some ‘undercurrents’ made by Islam could be discussed. The post- Soviet experience seemed to be more obvious from the interviews and the literature regarding cultural issues. Finding relevant literature from this region has proven to be hard though, especially regarding management questions. A call for more management research from Caucasus and Central Asia is natural to give from my experience.

A majority of my data comes from talking with Norwegians, and I find those data in a way more reliable as I understand more of the Norwegian thinking. Talking with Azerbaijanis is a challenge in so far I don’t know much of their context and background. One advantage was that I had spent four months in the country before I started collecting data. But I was still taken by surprise when one local manager said that “there are no differences in culture between Norway and Azerbaijan”, and “culture and language has not made any problems for the communication between coworkers in Aker Solutions.” How am I to understand that answer? Now, another surprise came when a Norwegian manager said something of the same. I admit that regarding culture as a problem and obstacle for communication is a bias I might have from my own experience. But clearly from what some of the other managers answered, there must have been more to say about the topic than “no problem”.

I assumed (with my ‘Norwegian glasses’) that the local manager did not want to say any negative about his coworkers or the company. At least, the Norwegian workers were freer to throw out statements that held different critiques toward the head office and so on. I can understand if some of my respondents were uncertain about how their comments would be used, especially if they gave negative remarks. At the same time, my lack of understanding of the local context could as well have been an obstacle for asking better questions that might have elevated richer information from the local experience of knowledge exchange than what I got.

*What a scientist observes is not independent of the process of observing, but an outcome of the scientist’s methodological interaction with, and conceptual constitution of, his or her objects of knowledge, contrary to the more positivistic stance in which a researcher is a neutral collector of data. (Hansen, GH (2008))*

I find the comment of Hansen (2008) very useful. The researcher has a hard time being ‘neutral’, all the time he also is a human being with feelings, memories and dislikes. The same would be true for the interviewees, not at least the expats commenting on cultural issues. They have certain concepts about the reality in which they interpret what they observe according to their previous knowledge about the culture. This might or might not be correct. My own methodological glasses and concepts about the different topics also colored the situation. Maybe my responses to what was being said could have drawn the next answers in a certain direction, focusing on the things that I could relate best to. I tried to limit commenting what was being said to not divert the interview by my own bias, but important aspects might have got lost, as I might have blocked or turned the interviews away from certain areas.

# 6.0 Findings

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## 6.1 Findings

I will now give a presentation of my findings about enabling conditions for knowledge sharing within Aker Solutions, Baku, organized in line with the literature review of enabling conditions for knowledge sharing, and in line with the research questions outlined in last chapter. The three main issues of knowledge vision and strategy, organizational structures and organizational culture enabling knowledge sharing also organize the presentation of findings, with the following order:

- How is knowledge sharing integrated into the knowledge vision and strategy?
- How is knowledge sharing mediated?
  - Knowledge sharing through technology
  - Knowledge sharing through meetings and reports
  - Knowledge sharing through rotation of workers
  - Knowledge embedded in procedures and technology
- How is knowledge sharing situated?
  - Knowledge sharing and cultural issues

## 6.2 How is knowledge sharing integrated into the vision and strategy?

The first research question deals with the connection between vision, strategy and knowledge sharing. If knowledge management is going to be effective, the model of Von Krogh et al. (2000) and Ichijo (2007) suggests that knowledge sharing must spin out of a vision that is being shared and strategically worked out throughout the company. I reason that if this connection is there, the strategy of the company should include knowledge management elements. Therefore I ask about how knowledge sharing is integrated into the company's vision and strategy.

I did not dwell much on this question during the interviews, except for in the interview with the Regional Manager, who I thought was the one in the best position to explain the fundamental thinking of the company. From official documents I found that the vision of Aker Solutions is “to be the preferred partner for solutions in the energy and process

industries” (‘Reference manual’ for Aker Solutions employees). The Regional Manager explained the strategy of how they were to fulfill that vision.

*The strategy is that we will truly be an international company. In order to do that we will have strategic, geographical locations worldwide, and in each of those locations, the goal is to have (...) the same procedures, processes and competence level, so that our clients who are very mobile, no matter where they are in the world, they can have the same level of service and commitment as they have for example in Norway. (We used to call it the McDonald’s effect). (Regional Manager)*

This strategy shows how central knowledge sharing is for Aker Solutions in order to fulfill its vision. Procedures, processes and competency level is going to be shared worldwide, so that the customers always will recognize the company and find it easy to work with Aker Solutions no matter where in the world it would be.

How they will share ‘the Aker structures and culture’ throughout the world is therefore a critical question. It was very interesting to hear the Regional Managers reflections on how Aker Solutions is in a process of change from being a very Norwegian – centered company to becoming truly an international company. The normal procedure before had been for new employees to go to Norway for absorbing ‘the structures and culture’ there, by learning processes and procedures that were specific to Aker Solutions, and then bring the new competencies back to their respective offices, if they did not work in Norway already. Or the head office in Norway were sending experts to different locations of the world to work for one or two years, and the idea was that these experts would share their level of competency and their way of working with their co-workers in that location. Now the strategy is to build up ‘the Aker Solution environment’ locally, not being dependent anymore on the resources from the head office in Norway:

*We were told last year, all the global management, to build up our own local resources rather than rely on help from Norway (...) We are still working on it (...) The question we have asked ourselves is that how do you build up the same level of competencies or expertise in a different location. (Regional Manager)*

One of the interesting aspects of this intended change within Aker Solutions is that it shows an integration of knowledge sharing with the overall vision. If Aker Solutions’ vision is that it should be ‘the preferred partner for solutions in the energy and process industries’, and if

becoming ‘a truly international company’ is the strategy, in order to best serve clients no matter where in the world they are (Regional Managers explanation), then the implications for knowledge sharing is that ‘structure (processes and procedures) and culture’, must be distributed throughout the company in a new way. The old way of trying to make foreigners into Norwegians in order to work ‘the Aker way’ is not seen as the solution for the company anymore. Instead, new ways of sharing this (tacit) knowledge must be activated.

*We started a real effort to change that (old) culture (of making everybody ‘Norwegian’) many years ago, but it didn’t really get momentum up until maybe three or four years ago. (Regional Manager)*

The first example he started to give was that they had got the ‘Aker Solutions Intranet’ with the same format for all, with general company news and so on. “It’s a social media format, really”, he commented, “and this helps a great deal to interact across the larger Aker Solutions company”. In other words he pointed to the integration of *enabling structures* for knowledge sharing to follow through the strategy and reaching the overall vision of the company. In this case he focused on how the knowledge was mediated by technology, but he also focused on the streamlining of processes and procedures. In addition to structural issues of how to *mediate* the knowledge sharing process, he spoke a lot about ‘*culture*’ and how Aker Solutions is *situated* in an unique local context in Baku and how that local context relates to the Aker Solutions culture worldwide.

*One of the key things about Aker Solutions is the culture. (...) They are one of Norway’s favorite companies to work for, and that is for a reason, and that is rolled out to the global company as well. I would easy say that Aker Solutions is one of the best companies to work for in Azerbaijan as well.(...) But to roll out that kind of culture is hard in each location (because of local regulations), but it is possible.(...) People are so important. If you get the wrong people, you have problems. We have been fortunate. The three first employees are still with us today, and they anchored us into Baku, explaining the local culture, spreading Aker’s culture (Regional Manager).*

From these findings I can see a clear integration of the enabling conditions for knowledge sharing into the strategies and vision of Aker Solutions. The company understands that working on strengthening the structures and culture (the enabling conditions) for knowledge sharing is a critical activity for reaching their overall vision of Aker Solutions to be the preferred partner for solutions in the energy and process industries.

## 6.3 How is knowledge sharing mediated?

### *Knowledge sharing and organizational structures*

The second issue in this research is how knowledge sharing is mediated within Aker Solutions. Human and material structures can enhance knowledge sharing, as discussed in the theory of this paper. How people interact in the daily work is framed by the processes and procedures installed by the company, as well as what kind of communication and frequency of contact that is made possible through systems of technology and transportation.

The findings resemble much of what I have described in the literature review on the subject. I categorized the findings in different ‘media’ and organized the presentation according to these categories:

- a) Knowledge sharing through information technology
- b) Knowledge sharing through rotation of workers and employee training
- c) Knowledge sharing through meetings and reports
- d) Knowledge sharing through knowledge embedded in procedures and technology

### 6.3.1 Knowledge sharing through information technology

When introduced to the intranet by the Regional Manager, I could see almost like a social media platform with personalized features like news from the place of interest (for him it was UK), different tools for communication, like opportunities to share your thoughts and ideas on any subject (almost like a forum or a blog) and a whole range of databases for knowledge sharing between locations. I will now take some time to give an overview of some of the Information Technology reported in use by the employees as well as challenges and opportunities connected to them. The interviewees mainly talked about different kinds of databases and the use of bulletins and alerts. Through the research I also learned that they often used video conferences with Norway as a cheap and effective way of conducting meetings across long distances. The communication technology was not touched upon more than being mentioned, so I will not treat it here as an issue in the knowledge sharing process, although it definitely is an enabler for the process of knowledge sharing.

#### **Databases on previous service work**

Aker Solutions has a common data system, called the share point server, where all service jobs and all old modification jobs are stored. The reports and notifications are made by

service people all over the world. Managers have access to this information, and it can be useful in the daily work when questions come up that has been dealt with other places, as one example illustrates:

*I have just done one (case) now on a possible upgrade we will do in this country on a rig. There is a rig in America that is going to do the same upgrade with the same system that we have got. I was asked the other day what would basically be involved, and I went on the share point server and I even pulled the purchase order with all the parts and all the prices and I know the approximate price is 5.3 million dollars.  
(British TCE)*

Managers know many people to call and confer with, but sometimes they have to search outside of their personal network. A database can tell enough to get started moving in the right direction. “The share point server is kind of like the headlines in a newspaper”, the British TCE explains, “you don’t get the full story maybe immediately, but from the headlines you know where to go for getting the full story and who to call for more input”.

Databases can be good for storing information and making it available for others on the intranet. However it can sometimes be difficult to find exactly what is needed, when the amount of information increases. Two interviewees expressed a concern that the tools did not give them more easy access to information:

*As far as I know, we don’t have a very good tool for transferring knowledge experiences. (...) We use a platform called SAP where you can find information. But it is a jungle, and not always the easiest way to get information. I don’t think we have any good tools for transferring experience where it is easy to navigate. (Norwegian TCE 2)*

*It is quite difficult, because it is too much to look for. (...) We rely more on people’s memory and their brains. Because someone will say, I remember in 2003 that a similar situation occurred, so we check (in the database) for what happened in 2003.  
(Technical Manager)*

The database is a place for sharing learning from projects and experiences with equipment. But if it is hard to navigate, all the information stored might end up not being used. Also the Regional Manager recognizes that the actual use of all the databases might be less than intended.

*There are tools and resources available, but how often we use it is maybe a little bit questionable. But it is there, and it is encouraged. (Regional Manager)*

For a while, different places used different ways to record cases, and this would of course make it hard to find cases from other places. The problem with navigation has tried to be dealt with by introducing a common reference system with certain categories and search words attached to each case.

*When I worked in Norway, we insisted on having uniformed solutions for the reason of sharing experience. We tried to define how to file a new case with the right codes, referring to equipment, a short description of the case and so on. (...)If there is a problem on a rig down here you can search through several databases to find technical reports, and search on the same topic as your problem to find similarities with other cases other places. (Norwegian TCE 1)*

Streamlining processes has been important in order to connect and draw knowledge from the whole organization. When a case is recorded in the database today, a similar case will be recorded in a similar way, making it easy for others to find it, the Norwegian TCE points out.

### **Other databases**

In addition to stored reports from service managers, the Norwegian Work Site Managers explained that there are also databases for parts and drawings and other ‘nice to know’ documents. Having access to drawings for the equipment is very useful in times of overhauling or service work. These databases are run by the engineering department in the head office, connected with the production department who owns the equipment. There are also more informal intranets where posts of “nice to know” are shared:

*This is a database with word documents that shows how you can do different things and things that is ‘nice to know’. There is a lot of information you can find there, like for example how to calibrate certain equipment. (Norwegian Work Site manager 3)*

When changes in equipment and technology occur frequently, the ‘nice to know’ database helps explaining how to use the new technology, written by other who have gained experience from using it. In this way, experiences are being shared between co-workers in the same field.

The TCE’s as well as the Work Site Managers all explained that suggestions for changes in products are reported to the production department in Norway and kept in a database for



evaluation. Customers sometimes come up with ideas for optimization of the equipment, and managers in Baku have to evaluate the ideas if they are feasible technically.

*You have to be a bit selective about what you get, because again it is money and it is time. If you give everybody what they need or want, the rig would never work, we would be building it all the time. (British TCE)*

After a primary filtering, ideas are sent on to the production department and they can decide if it is possible and desirable to make changes as suggested. Knowledge discovered in Azerbaijan can in this way be transferred back to Norway and out to other locations in the world. But the process cannot fully take place in Baku, as changes in products and procedures must be agreed upon with the production office in Norway before they can be implemented. One of the reasons is that the equipment is very complicated, and only those who have designed it really know what kinds of changes can be done without jeopardizing security and break certain international standards of such equipment. One might say that this slows down possible innovation processes in Baku, but at the same time, this ensures a very high quality that is needed to be ‘the preferred partner’ of oil companies worldwide. (Norwegian TCE 1)

### **Bulletins and alerts**

There are also bulletins and alerts going out in case of incidents on one rig that Aker Solutions want to alert other customers about, or it can be product developments that they want to share to all customers with similar equipment. Most of the bulletins (e – mail warnings) are related to Health, Environment and Security (HES), but sometimes an incremental change or innovation in procedures or products is offered to all customers and broadcasted in this way. The knowledge shared about certain weaknesses in some of the equipment or procedures can be vital for operations worldwide. Sharing this knowledge is absolutely necessary. Knowledge about optimization of products and procedures are nice to know, and this sharing comes like a bonus for customers connected with Aker Solutions (Reported by the British TCE).

### 6.3.2 Knowledge sharing through rotation of workers and training of employees

The rotation of workers is a way to try to overcome distances in geography and culture that could occur when dealing with TNC's. Cultural distances, or more precisely distances that are related to institutional, organizational and cognitive aspects of knowledge sharing (Stensheim 2011), could be addressed by 'knowledge activists' (Van Grogh et al., 1997).

#### Sending local workers abroad

Every new employer will get an introduction course in Norway for about six weeks. For engineers this includes working in the production, getting to know the equipment first hand as well as the people in the production department.

*This has at least two advantages, first that their competence increases, and secondly that they get to know people and procedures back in Norway. They get to know how things are working back in Kristiansand at the head office. (...) I think much is gained by breaking the ice, get to know each other and work together. (Norwegian TCE 1)*

I reason that the institutional distances related to local institutional frameworks might be influenced by sharing time and experiences together. Working with people from different cultures helps challenging old thinking and stereotypes. I also assume sending new employees to other sites to gain experience could strengthen the knowledge base in Baku.

*We have a trainer position that we have started now; one guy that is going to be our trainer in the future. He has been on courses in Norway, and he has just come back from a course in Korea where he actually gave a training session for the client under the supervision of the trainer. Again, it is a lot better to put people in the firing-line and let them do it. (British TCE)*

Young local experts are very eager to be challenged, and they earn most money by being off shore. In order to keep them busy, the office in Baku have to send them on projects also in other parts of the world, or else they will soon move on to other companies where they can get the challenges and income they are looking for.

*When time turns up that there are jobs in other countries or even in Norway hands on training, then we send them. It is a valuable thing, because they get to see that there are different ways of thinking and different ways of doing things, rather than the way they have been taught or brought up.*

*It is encouraged even in the main office to have people from different cultures and different backgrounds to be a part of the team, because you get different expertise. It's a kind of a melting pot of different cultures which can pass on ideas and maybe find better and easier ways of dealing with daily work. (British TCE)*

It is very easy for Aker Solutions as a concern to do this, because they have offices in different parts of the world. It is relatively easy for Aker to send people to Singapore, to Korea or to America for the simple reason that they have offices and workshops with many similar conditions within the company. The technical language is basically the same (commented by the Technical Manger). In Aker Solutions the majority of the work is done in English no matter whether you work in Norway or Azerbaijan, because it is a multinational corporation.

### **Expats coming to Azerbaijan**

Knowledge workers coming to live in Azerbaijan for one month or one year creates opportunities for younger local workers to observe and work with experts in the field. Experts are very expensive to keep in Baku, because there is not enough work to keep them busy every week. But now and then they can come to do some upgrades or maintenance work. Then knowledge might be transferred in the process.

*The only way to exchange knowledge is to work together. New technology comes from Norway and we have to work together to exchange experiences. (Azeri Technical Manager)*

Not only technical skills are being transferred this way. Also procedures and ways of working could rub off when expats moves around in the office in Baku in close contact with local managers and workers.

*Many of those who work here today have brought with them their experience and their way of working. In this way they have been supporting the transfer of procedures. (Norwegian TCE 1)*

*This summer, we will have a dedicated team down here looking at equipment optimization and rig optimization. So there will be quite a number of hours and resources used to try to optimize what we already have. It might be terms and conditions, it might be procedures, it might be equipment. But there is a big project now coming up. I guess it will be running the next two till three years. (British TCE)*

A project with optimization of equipment and procedures could lead to a great deal of knowledge exchange as state of the art technology is being implemented in projects in Azerbaijan and used by local workers. I reason that the procedures to identify potential improvements in the use of Aker equipment in themselves are carriers of much experiential knowledge.

At the work shop, some Norwegian managers are staying permanently, and others are rotating every month with a colleague. The head office has employed 20 trainees, just graduated or with some experience, and they go to the work shop with the more experienced managers to work with them. The managers are there to train and equip the younger engineers with on the job training.

*With young people, when there are things they don't know how to do, we have to teach them. There is constantly an exchange of knowledge taking place. (Norwegian Work Site Manager 1)*

The Norwegian Work Site Managers discussed that this was how (they) the Norwegians learned off shore drilling in the beginning. American workers came and worked with Norwegians to gain maximum knowledge transfer in the process. One of them commented that “today this is happening in Azerbaijan, as Norwegians are mentoring young local engineers on the job”. Maybe I am wrong, but to me it seemed like this line of knowledge exchange was admitted with a kind of sacred reverence, almost like “look, we were raised up by the Americans who came to us when we were young, and we are now paying it forward to another country. Like the Americans did for us, we now do as well for the young Azeri engineers”.

### **Need for additional exchange of key personnel**

Another way of strengthening learning could be to let people from production in Norway come to Baku and be a part of the work here in order to understand challenges and opportunities better.

*Those who are product responsible in Norway should come down and see how things work here to better understand the challenges we face. They are well qualified people, but to sit in Norway and listen to reports from us is different from actually being here. (Norwegian work site manager 3)*

Not only managers from the production department could learn from visiting Baku, a general call for more people in the head office with cross cultural experience can be voiced from the expats in Baku.

### **6.3.3 Knowledge sharing through meetings and reports**

Using IT tools and working together are two important enablers for knowledge sharing in Aker Solutions. A third concept of sharing is what takes place in formal (and informal) meetings before, during and after a project.

#### **Meetings every month with head office**

Every month the top management holds a meeting with people at the head office in Norway. Experiences and updates are being shared and different issues discussed.

*Much of this is about technical questions, problems where we need input from them, but also about general things like competence development and so on. Need for courses could for example be discussed. (Norwegian TCE 1)*

The contact with the head office is of course necessary for practical reasons. To plan together for daily operations, discussions like this would be more effective than trying to accomplish the same work only by mail in written format. But I also see the cultural distances playing a part of the picture. If Aker Solutions is to be one global company, than certain cultural traits should be transferred between the different locations, enabling knowledge sharing to flow more unhindered by institutional, organizational and cognitive obstacles. Meetings with Norway might contribute to strengthen the common organizational culture of Aker Solutions transnationally.

#### **Meetings every week with clients**

Every week there are also meetings with the customers. Aker Solutions has a lot of knowledge about the equipment because they have done the design and production of it. But when it comes to how the equipment functions in different situations, the clients are the ones who actually know the equipment best.

*I don't consider Aker Solutions or myself to be the absolute expert on this equipment, because I don't use it. We make it, we install it, we wave bye, bye to it and go home.*

*(...) When it gets a few years older, a bit tired and irritable, you know I don't see that.  
(British TCE)*

Through weekly meetings, knowledge about the equipment in use is transferred back to Aker Solutions from their clients, and some ideas of changes are sent back to the production department for their review and input. If this upgrade is something that could be sold back to the customer, much focus would be given into redesigning the equipment (British TCE).

### **Meetings (formal and informal) every day with coworkers**

Every day there is communication with coworkers in Norway through e-mails and telephone contact. The work itself demands a high degree of communication between Norway and Azerbaijan as well as with other locations. Informal communication at the workplace also contributes to knowledge sharing between coworkers.

*The leaders meet every Monday, and they inform us if there are cases we need to know about. But we are a small office, and it is easier to just talk informally. (...) People will hear what you are talking about, and they will come with suggestions as they hear you talk about a problem. This also happens here in Baku, when there are challenges, we hear it and we talk about it on the spot, not in a formal meeting but in the corridor.  
(Norwegian TCE 2)*

The water tank (literally) functions as a natural meeting point at the head office. Fruit and biscuits along with tea, coffee and cold, clean water draws people out of their places now and then. The copy machine is also strategically located in the open space nearby the refreshments, all components working together to create informal meetings among the coworkers at the head office. Why place the copy machine in a small, uncomfortable room when so much time is spent there during one day? It is better to make it an opportunity for conversations and collaboration as they have done at Aker Solutions (consciously or unconsciously).

### **Reports after work periods**

Before going home to their homeland after a four week period, every expat worker reports on what they have done the last period. It can be hard to pass on exactly what has been said the last month, as not every incident can be written in a report. They can be called by their coworker when they are back in Norway or Britain, if there are questions that need to be

clarified. One Norwegian Work Site Manager (5) commented that putting many details into the report creates less need for additional telephone calls during their leave back home.

Sometimes client tries to take advantage of the changing of guards, and would say things like “your coworker promised this deliverance next week, with discounts”. Information about previous agreements needs to be double checked for this reason (Norwegian Work Site Manager 4).

Service workers off shore also makes reports from their period, and all reports are stored both in Baku and Norway for future questions about what has happened in the project (Norwegian TCE 2). With new people in the project, such reports can transfer knowledge and experience from old to new workers, but not all history can be stored (Norwegian Work Site Manager 5). The name on the report might be as well important piece of information, as it provides a point of contact if new people need to learn more about what actually has taken place previously.

### **Need for better project evaluation and transfer of lessons learned**

The Norwegian work site managers called for better evaluation after each project for stronger knowledge transfer between projects.

*A thorough evaluation by the end of every project is lacking. It should have been reported what can be improved for the next project. This is not happening today. (Norwegian work site manager 1)*

*In the last project we delivered some equipment that was identical with equipment in a previous project. But there were no exchange of lessons learned. The project leaders back home shared corridor, but they did not talk together. We got into problems, and the next day we heard that the other project had got into the same problems last time. (Norwegian work site manager 5)*

Many mistakes can be hindered if accumulating learning is taking place from each project. One way of transferring experience from one project to the next is to let people from the first project take part in the planning of the next project.

*We who have been part of the project here should also be a part of planning the next project. In this way our experience could be passed on. (Norwegian work site manager 1)*

Establishing strong project evaluation procedures should not be too hard for a company like Aker Solutions. It already takes place in other parts of the organization, as one manager told of his experience with good project evaluation after a project in South Korea. One change that has been done lately is that the leader of production now also has been appointed the leader of service jobs. In this way the two essential functions in the process is linked together. Hopefully this will lead to better communication and coordination of resources and knowledge exchange in the future. A better coordination could lead to lower costs as pointed out in this comment:

*Much money and time can be saved if real transfer of lessons learned can take place from one project to the next. (Norwegian work site manager 1)*

#### **6.3.4 Knowledge sharing through procedures, technology and training**

According to Blacker (2004) much tacit knowledge can be mediated in structures and procedures (knowing manifested in systems of language, technology, collaboration and control).

##### **Procedures**

A procedure is the way of collaboration and control that experienced workers know by instinct. The idea of a procedure is to create a ‘recipe’ that new employees can follow in order to succeed with their tasks.

*Every department down here has a model for how to do a project. This procedure reflects this flow of working that an experienced worker knows by instinct. The model shows who to contact, not by name, but by position, and the names can be found other places. (Norwegian TCE 1)*

Knowing who is who and what to do is useful for planning and executing complex technical processes. There is some knowledge though that cannot be captured by any procedure. Even if you follow a procedure, it does not mean you will have the same result as an experienced worker. And besides, having done a process job right does not necessarily mean that you have understood the concepts and ideas behind the process correctly.

Sharing experiences, solutions and knowledge across an organization is not unproblematic as one could end up with only sharing a solution to a specific problem in a certain context,



whereas the process and knowledge gained in the process is maybe the main learning to take away. “We are only transferring the solution to a specific problem and not the underlying competence” (R&D manager in Holm and Pedersen, 2000, quoted in Holden, 2002, 79). To understand the process, to have real competence and to really know the people to contact personally is very different from following a procedure, although a procedure might be a good starting point for new employees who don’t have the contacts and experiences of processes as the old employees.

*Another advantage from us who has worked at HQ is that we know people there to contact in different situations. Not everything is captured by a procedure. It can also be related to how and who to contact on the other side of the line. (Norwegian TCE 1)*

Who to contact is not always enough, one might also need to know *how* to contact that person, in the sense of what to say (and not to say). One of the reasons for success in the work might be that some workers know more people than others. Expats who have worked at the head office in Norway might get easier access to people and resources than ‘strangers’ with no strong personal relationships across the organizational departments (organizational distance).

### **Technology and training**

Equipment and software from Norway carries a great deal of knowledge in their share existence one Work Site Manager (nr. 1) pointed out: Innovation is expressed in new and upgraded products based on new technical knowledge and software engineering.

Spinning off from his observation, I reason that new equipment can also carry knowledge about new methods or procedures for drilling and extracting oil and gas. Equipment optimization can often be connected with breakthroughs in other areas of the production, and spillovers or adjustments in connection to this breakthrough can thus be observed in upgrades of the equipment.

Knowledge sharing could thus happen by share application of new technology or new procedures. Some new piece of equipment could carry knowledge derived from experience with certain problems or reflect security considerations raised by accidents with old equipment and so on. Experience can also be embedded in a procedure and procedures can thus have the potential of mediating knowledge throughout dispersed organizations (see Blacker 2004).

The Work Site Manager 5 commented that experience from the North Sea has so far formed the drilling equipment that Aker Solutions offers. In Baku, much drilling was based on manual tools, but Aker has brought much technology based tools. These tools were developed because of many accidents with manual tools in the North Sea, and answers new security rules in Norway.

*The equipment carries a lot of security concerns learned through accidents in Norway. This is also a way of transferring experience from Norway to Azerbaijan. (Norwegian Work Site Manager 5)*

One source of knowledge transfer is therefore the equipment itself. But in addition to this, formal training related to new equipment is also another source of knowledge transfer. Both employees of Aker Solutions and their customers have to be trained to operate new products.

*We teach the customer to use new equipment. Knowledge exchange happens in the process. (Norwegian Work Site Manager 3)*

Employees of Aker Solutions have access to much online training regarding general and specific use of the equipment. They also get classroom training and practical training as well both in Baku and at the head quarter in Norway. This spring, a simulator will be installed in Baku for training both employees and customers. Previously, simulator training has only been offered in Norway, and workers had to go there to get the input they needed.

## 6.4 How is knowledge sharing situated?

### *Knowledge sharing and cultural issues*

When commenting on work related challenges raised by cultural issues the Norwegian and British interviewees expressed concern with certain attitudes among local workers. Their main concerns were (1) attitudes towards planning, (2) a fear of expressing ideas freely, (3) a fear of losing face and (4) language barriers. I will organize this section according to these four categories.

The expat interviewees related some of these attitudes to an inheritance from the Soviet period, where hierarchy and position was a dominating factor for work relations. They also related some attitudes as a result of the high unemployment rates in Azerbaijan today and the consequently fear among local workers of losing their job.

#### 6.4.1 Different attitudes towards planning and time

The drilling industry is dealing with heavy investments in equipment and expertise, and stops in production costs a lot of money. One manager estimated that if one platform off shore stopped for one day (12 hours) it would cost one million dollars in lost revenue. In other words, you cannot afford waiting a long time for spare parts or expert personnel when you get problems in the production. That is one of the reasons why Aker Solutions has an office in Baku, to give support 24/7 with expertise and drilling equipment. But among the institutional structures of Azerbaijan the customs and laws connecting to import and export creates need for good planning in order to have parts available in the right time.

*Getting spare parts is very time-consuming. You cannot just call to get a part tomorrow. You kind of have to plan and prepare for future needs before it becomes critical. The customs have their schedule with about five days in the customs, and we often have to wait that long, unless we are able to push the process. (Norwegian TCE 2)*

One of the main keys to be effective in this environment is therefore good planning. If there is going to be an overhaul of equipment in September, preparations must be done early to make sure all new (possible) needed spare-parts are in the country before the work starts. But a continuing frustration for some of the expats is that planning seems to be a weak spot for some of the Azerbaijani workers, as expressed by two examples below:

*Competency in many respects, they have technically. The technical competencies are not lacking. But the biggest problem we have on a day to day basis is just planning basically. If you are going to do a job next month it's no good waiting the day before, before you start planning the parts and tools. It has to be done in advance. (British TCE)*

*They think more in the present, we are used to think more into the future. Like when we are going to fix a machine, I say tomorrow the machine comes, please get ready the tools we will need. But the next day, nothing has been prepared, and I ask why? They say that the tools are in the work shop and there is no need to go looking for them before you need them. (Norwegian work site manager 4)*

### **Are the observations correct?**

These observations are made by expats, and the observations say that some Azerbaijanis have a different attitude toward planning than westerners. If they are right about this, what could the explanation be?

Asking a Norwegian humanitarian worker who had been 15 years in Azerbaijan, he suggested that the future is uncertain in the eyes of many people, to the degree that what planned for most possibly won't happen. "Why plan if the plan most certainly will have to be postponed due to some unforeseen incident? They will not take action until they see the realities spoken of in the plans." He continued to point out that the experience from the Soviet time and present time has left people uncertain about what the government and rulers would do tomorrow. His wife (a British woman) added that Islam also made people fatalistic about the future, saying things like 'If God will, this thing will happen whether I strive for it or not.'

I am not able to judge from these comments what the full realities about Azerbaijani culture related to the issues of planning are. During my stay in Baku, I conducted a goal setting session over four days with 18 university students where I coached them through a process of creating a vision (20 years from now), breaking the vision down into long term goals (5 – 7 years from now) and short term goals (2 – 3 years from now) and then making a plan of what they should do the coming year in order to move in the right direction, regarding work, family and spare time. All I could say is that people are different. Some of the students understood the concept of planning very easily, but others had a hard time making plans.

From my experience as teacher in Norway with the same age group (18 years old), I would guess that some of those students there also would have problems in planning 5 – 10 years the road. But the general understanding of planning might be better integrated into the school system and the society in Norway.

A Norwegian teacher in the University of Languages told me that the time schedule of the whole university was made the day before or the same day as the semester started, and was object of change during the first week. One man had papers with all the classes and tried to find rooms and time for all the needs presented to him by teachers coming in and out of his office. In Norway that would have been seen as ‘bad planning’, but the tradition or structure is somehow different in Azerbaijan. Relationships are very essential, the teacher observed, and keeping ‘everybody’ happy, or at least the most important ones happy, might be more important than presenting ‘a plan’ ahead of time. Again, why plan, if you know that the plan has to change later?

### **Do they have a different concept of time and agreements?**

The Norwegian work site manager 3 also said that local workers had a different concept of time than expats. Agreements about when to meet did not seem to be treated too seriously always. In the main office, one TCE said that these problems did not occur much anymore, because the office leader had dealt very strongly with this issue and established firm guidelines.

I asked one Azeri employee in the office about the importance of relationships. He said that family and relatives came before anything else. He exemplified: Let us say an elderly close relative comes for an unexpected visit to town. This might cause other appointments to be canceled, because the culture says that elderly close relatives are very high on the priority list. “You just call to the boss and tell him that you cannot come to work, because you have to pick up this relative who just came to town.” So the regard for relations and hierarchy might count more than agreements with coworkers and even bosses, and thus overruling the concept of ‘time and appointments’.

### 6.4.2 A fear of expressing ideas freely

In knowledge intensive companies like Aker Solutions, the free expression of ideas and thoughts opens up for solving complicated tasks. Innovation, according to Nonaka (1995) happens from a combination of previous knowledge, and a team effort where several actors contribute with their viewpoints would therefore assumedly be profitable. However, expat managers experience among local workers a fear of freely expressing their thoughts, maybe due to a fear of losing their job. At least they point to a hierarchy that keeps people from stepping up and voicing their ideas if the boss has another opinion.

*There is a hierarchy, between your boss or your supervisor (and you). Many times they don't ask why because the boss has said you do it this way, and that's the way to do it, even if they know there is another way to do it. I think they know inside that there are different ways of doing things and different ways of asking questions, but the hierarchy of the moment does not allow that. (British TCE)*

As pointed out in the literature review, knowledge sharing could be hindered by an attitude of fear, if workers are afraid to share their thoughts (Davenport and Prusak 1998; Lee and Choi 2003). Using written documentation for capturing or sharing knowledge can also be hindered, because anything written could be used against them later:

*One result of this is that things could have been more written down, but instead it tends to be done orally, maybe for that reason. For example many will come and tell something instead of sending an email. Because if it was not correct what they said, then there is no record of it. (Norwegian TCE 1, translated by the author)*

Being fired from Aker Solutions for sharing a different viewpoint with your boss would not be very realistic. But in most local enterprises, that would be a very possible scenario. Because of high unemployment coupled with weak juridical protection, many Azeri workers face a daily threat of losing their job if they displease their boss. A general stronger emphasis on hierarchy can also explain some of the fear observed.

The Norwegian humanitarian worker suggested that people sometimes don't have own opinions about an issue, and that might be a reason for not sharing 'their thoughts'. He had observed in many meetings with local employees, that the managers would be active and have input, but upon asking other employees about their views, these workers would stand up and praise the work and say how well they thought of what was going on. They did not have 'own

opinions' to share, seemingly not because they were repressing own ideas, but more because they had not been trained for critical reflection.

My first reaction to this explanation was that it almost felt to be a racist view. How can we say that some people are not able to think for themselves? Still, this Norwegian humanitarian worker had been in the country for 15 years. How wrong could he be? The Norwegian teacher also said that critical thinking is not a part of the training of the students, even not at the university. Before they came to his classes, they had never written a longer text than two (computer) pages, but these texts were more like repetitions of what the teachers had said, and not dealing with different literature or raising questions about what they have learned.

### **One of the possible roots of the issues: The Soviet education system**

Burkhalter and Shegebayev (2012) describe the education system in Kazakhstan, a country that resembles much with Azerbaijan, being a Muslim/Turkic/post-soviet/oil driven society by the Caspian Sea. The schools and universities are still carrying the inheritance of the Soviet time, because many of the teachers today are trained under the old system, and they have not learned anything else. The Soviet system was overloaded with memorization and lecturing, because most of the time, textbooks were not available. "Even long passages from novels were often rewritten from memory, although seldom discussed for themes or ideas. (...) Lecture materials were often written on the board for students to copy. There was no discussion of the lecture with the teacher." (p. 62)

Fear was prevalent in many spheres in the former Soviet Union, including its education system. Students suffered from fear of failure and expulsion, not finding or losing a good job, and not knowing the answer and the attendant humiliation, ridicule and shame if they did not. Burkhalter and Shegebayev (2012) give examples from present day teachers how they recall the schools they attended in the soviet period:

*We were always told what to do...like a herd of sheep. These were the limits, this is what you do and that's it. Don't jump over the fence. Stay inside where you'll be safe.*

*On the day of the exam, people were so nervous and shaking ... [The teaching method was to] scare everyone. That way, we would be obedient; that way, we'd be machines. That's why the Soviet system managed to last for seven decades. Millions of people were treated as if there were in a concentration camp.*

*Critical thinking in Soviet times was taboo. People knew, but they couldn't speak  
...We can't have Animal Farm anymore.*

Also the Norwegian managers from the work site commented that many are afraid to say what they mean and afraid of making mistakes. They are also afraid of asking questions, which reveals that they don't know what to do. A part of the picture is that they tend to do only as instructed, nothing more and nothing less. The managers thought this attitude came from the Soviet era when doing exactly what you were instructed was the ideal. In one way it relieves you of responsibilities if anything goes wrong, since you only did what you were told to do. The boss will be the one to blame, as everyone only followed his instructions.

The Norwegian teacher I spoke with in the language university in Baku expressed some of the same experience. Once he went to his institute leader and suggested how to conduct the oral exams that year. He expected a discussion and some questions from the leader, but he only said "yes, that is good". To explain this very 'thoughtless' behavior, the teacher could only think that someone higher up had to accept the plan anyway, so there was no need for him to spend time to think about it. He would not be responsible for the decision anyway, so why bother? For me as a Norwegian, this attitude seems a bit 'irresponsible', but inside the school system and the culture, it might somehow make sense.



### 6.4.3 Fear of losing face

*If you ask them about something, they might have problems saying “I don’t know”. They rather give an answer, but it is not always correct or in line with the reality. They don’t want to lose face. (Norwegian TCE 1)*

The concept of ‘face’ that can be found in many cultures (if not all, to some degree?) can be seen as an underlying factor in the cross cultural communication. The issue of shame and pride might for example be connected to a high regard for hierarchy as it would be ‘shameful’ to oppose the boss. The shame of not knowing the answer seems to cause some workers to give a wrong answer rather than admitting they don’t know.

*I saw in my first year (as regional manager) an organization that said ‘yes’ and nodded their head, but that’s not what they meant. I jokingly said that the first person to come and ask me for help and to tell me that they don’t know, then I will take them for dinner. (...) I tried to encourage people to do what they would never have done in the past, and that is to admit that they either don’t know something, or that they need help. (Regional Manager)*

Confronting someone publically can also cause shame, because if the person has done a mistake, everybody will know about it, and he has lost his face. It can be ok to confront or criticize someone in private, but not with others present.

*I was walking in the work shop with a worker one day, and in anger over a mistake someone else had done, I threw my gloves on the ground and shouted out loud. For the next couple of days I had to work hard to apologize for that worker what I had done, because my actions might have led other workers to think I was angry with this man I had walked together with, and he had lost his face. (Norwegian manager 5)*

For obvious reasons, not criticizing people (or their ideas) publically can hinder the dynamic team work needed for solving intellectual problems. In many cases, a problem might be solved in several ways, but for the sake of finding an as good as possible solution, critical thinking and discussion is welcomed. But if participants feel awkward criticizing the ideas of their coworkers or bosses, then this process might be delayed or halt.

The other side of this coin is pride. Some workers will insist in having right, and might not be open for learning something new, or be corrected. If your attitude is that you know it all, then it is hard to learn or cooperate with others in a team effort.

*They don't like to be told how things should be done. I have to let them make a mistake before I can correct them. (Norwegian work site manager 5)*

*They will not admit "this I cannot", and you will never hear them say "I don't know". If they have made a mistake, they don't want to admit it. (Norwegian work site manager 4)*

The fear of not knowing the answer or to be wrong about something can derive from several sources, as we already have discussed: Soviet school system and work system, pride and shame or respect for 'elders' (read: hierarchy). Burkhalter and Shegebayev (2012) comments on the close link between fear and respect, by quoting a famous saying in Kazakhstan: "you are scared of (someone) – means you respect (someone)" (Deriglazova 2005, p. 71). They continue to say that the as a consequence of fear and humiliation, now drawing on the work of Larisa Deriglazova (2005, p.9), "one will work hard at minimizing risk, or avoiding risk, to avoid shame and the lowering of self-esteem". In other words, a culture of fear creates a defensive and restricted behavior that counterfeits spontaneous initiatives or critical discussions, in conflict with recommendations given in the literature for enabling conditions for knowledge sharing.

#### **6.4.4 HES as an example of the issue of fear and organizational learning**

A huge area of knowledge exchange is related to the topic of health, environment and security (HES). The focus on HES in Norway has been transferred to the office in Baku as well. HES procedures carry learning from experience in the North Sea and other places of the world and comes to Baku with an opportunity to learn the wisdom behind them. It is not obvious that all workers will learn from the knowledge embedded in HES rules.

*BP's demands for security at the work site have improved the situation a lot. But I doubt it can be called learning. When the workers move over to another site, they will probably not bring with them the same emphasis on security. (Norwegian manager 4)*

A general lower concern for security might also be found among the local workers. At the same time, they might be afraid to lose the job, and for that reason not ask for better security in other work sites. The managers at the work shop concluded that the HES rules of BP and others have worked, but mainly for the reason that workers would be fired if they did not follow the rules. Real learning had not taken place to a large degree. How can Aker Solutions create real learning in the very important area of HES?

Just as a curiosity, when I asked an employee from Statoil informally about his opinion on this matter, he simply said that they had to send new employees to study abroad for a while, in order to build the critical thinking needed for such learning processes with Azerbaijani employees, because the school system in the country did not encourage critical thinking.

But in a maybe more cost effective way, with the understanding that underlying concepts and worldview might undermine attempts to organizational learning, how can double-looped learning (Argyris & Schön, 1996) be deeper integrated in the learning processes of Aker Solutions in Baku, not at least regarding HSE?

#### 6.4.5 Language barriers

Some other behavior that Norwegians don't understand was also reported related to language and communication. In meetings after something had gone wrong, and the leader said "what can we do better next time?", individuals could start defending themselves or take on the whole blame for what had happened. They could say "it was my entire fault; the others are not to be blamed". But the question was not about whom to blame, but what the whole team could learn and improve from what happened. For some reasons, the question triggered a reaction from the Azerbaijanis that was not intended by the expats. As I have mentioned, the meaning of words are connected with culture and context.

*The language is the biggest challenge that any company can have! Three hundred times a day, seven days a week, 365 days a year there are conflicts and misunderstandings because of language barrier. (...) We could get rid of a lot of conflicts if we could all speak the same language. (British TCE)*

Language is for obvious reasons a central part of good communication and knowledge sharing. Even though communication can take place by 'body language' or by the use of symbols, drawings and pictures, most people recognize that words are very effective carriers of meaning, if they are interpreted correctly.

*They often understand what you say, but not always what you mean. (Norwegian work site manager 3)*

Speaking of understanding language, it is not only about the technical ability to know the correct grammar and vocabulary, one also needs to understand the context and culture of what is being said, as this part of language is what often causes misunderstanding and conflicts.

*Language is a tool, but it is not always what you say, but how you say it; what tones you use, what expressions you use. So you can say something nice, when you actually have said something very bad. (...) What can be said in one country does not always work in another. (British TCE)*

The issue of language is partly an issue of language skills, but also a question of cultural skills. In the work shop the managers said they had too few people who knew both Azeri and English, too few ‘interpreters’ as they called them, that could help the communication flow well. But the managers in the office all worked with people who are speaking English, but some of them still found it hard to communicate the right meaning of what they wanted to say:

*I know what I want to say, but maybe they understand something else with the same words I use. So sometimes I have to explain things more than one time, and it takes time. (Expatriate manager 2)*

Knowledge sharing and communication takes more time when there is not a shared cultural understanding of the meanings of words. Explanations must be given more than one time, and this hinders a free flow of knowledge exchange. Lower understanding of language hinders the work even more. This should be considered by transnational corporations if they want to make their work more effective cross culturally.

# 7.0 Concluding remarks

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## 7.1 Concluding remarks

This thesis has presented a study of enabling conditions for knowledge sharing within Aker Solutions, Baku. The theoretical foundation of this presentation is taken from the idea of ‘enabling conditions’ by Von Krogh et al., 2000 and Ichijo (2007), coupled with inspiration from Blacker (2004). Ichijo (2007) is calling among other things for a knowledge vision and strategy, organizational structure and organizational culture as enabling conditions for knowledge sharing. Blacker (2004) talks about how the processes of knowing are ‘mediated’ and ‘situated’. Combining the inspiration from Ichijo (2007) and Blacker (2004) made me ask three questions in this study:

- 1) How is knowledge sharing integrated into the knowledge vision of Aker Solutions, Baku?
- 2) How is knowledge sharing mediated within Aker Solutions Baku and between Aker Solutions Baku and Aker Solutions elsewhere?
- 3) How does the particular context in Baku suit knowledge sharing within Aker Solutions Baku and between Aker Solutions Baku and Aker Solutions elsewhere?

## 7.2 Summary of findings

Findings show that the process of knowledge sharing is well integrated in the strategy and the overall vision of the company. The global and regional management understand that in order to achieve their goals, knowledge management is a central part of that. Emphasis is put on organizational structure and organizational culture, in lines with the theory of knowledge management described in this thesis.

Knowledge sharing is mediated within Aker Solutions through IT, rotation of workers, training of employees, meetings, reports and by knowledge that is embedded in technology and procedures.

Knowledge sharing is situated within Aker Solutions, Baku where the local culture in certain regards work don't suit the culture of open knowledge sharing as promoted by Aker Solutions, due to lack of ability to plan, fear of sharing ideas, fear of losing face and language barriers. But the technical competencies are good, creating knowledge sharing opportunities.

## **7.3 Recommendations for Aker Solutions**

In many ways, the operations of Aker Solutions in Baku are impressive. The recommendations given is my contributions to underline some of the directions and aspects of possible improvements found in this study.

### **7.3.1 Need for better project evaluation and transfer of lessons learned**

The Norwegian work site managers called for better evaluation after each project for stronger knowledge transfer between projects.

*A thorough evaluation by the end of every project is lacking. It should have been reported what can be improved for the next project. This is not happening today.  
(Norwegian work site manager 1)*

Many mistakes can be hindered if accumulating learning is taking place from each project. One way of transferring experience from one project to the next is to let people from the first project take part in the planning of the next project. A better coordination could lead to lower costs as pointed out in this comment:

*Much money and time can be saved if real transfer of lessons learned can take place from one project to the next. (Norwegian work site manager 1)*

### **7.3.2 More local managers needed**

The original plan was that expats would leave the work over to locals after some year. They are still in Baku today, so the process has been in a way slower than planned. Transnational companies like Aker Solutions might not try to get rid of all expats, but one goal might be to get enough local managers in place to not have to station expats in the country for long periods of time, as the cost is quite high.

Aker Solutions worldwide is in a process of building up resources more locally in each office, to be less dependent of the head office in Norway. In Baku several trainees have been employed, and tending to continue to their growth and development, as well as to the growth of all the other local employees in Baku should be a strategic activity in order to rise up more local managers for the future. Potential leaders could be invited for action learning with coming leaders in other locations, for building cross-cultural friendships and competencies.

### **7.3.3 Need for additional exchange of key personnel**

In order for the wider Aker Solutions, and not at least the head office in Norway to better understand the challenges and opportunities in Baku, not only managers from the production department could learn from visiting Baku, but generally more people in the head office could gain insight from a cross cultural experience of working in Baku. If Aker Solutions genuinely is going to be an international company, I suggest that as many as possible among the top leaders would spend considerable time working abroad. Alternatively it could be strategic when recruiting top leaders to look for people with a substantial amount of cross cultural experience, and even employ top leaders in the head office in Norway from several of the 30 countries where Aker Solutions is involved. In this way Aker Solutions can take a good step toward truly becoming an international company.

### **7.3 Recommendations for future studies**

More research should be done about general management issues within businesses in the region. Cross – cultural issues and aspects of work attitudes in connection with the post – soviet heritage could be fruitful.

Further I would suggest comparing a Norwegian company like Aker Solutions with another transnational company in the same environment, but of another origin country. For example comparing a British and Norwegian or a German and Norwegian company in Caucasus or Central Asia might reveal cultural and structural aspects about the transnational companies and their backgrounds as well as more insight into the local context of the region.

Finally, I would like to again draw attention to Hansen (2008) who calls for more integration of international and local perspectives to understand the internationalization process taking place when a firm goes abroad or when foreign firms comes into the local environment. I cannot say I followed this recommendation myself, but I can see the potential advantages of this method, and I also recommend in line with Hansen (2008) to go after more local interviewees, even ‘on the fringes’ of the company studied, like suppliers, competitors, clients, law makers and others who might have a comment about the internationalization process taking place. It might be more difficult than what I have done, but possibly also more rewarding.





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