How to share what you cannot see – *A study of the sharing of tacit knowledge within Pricewaterhouse Coopers*

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**ABSTRACT**

**Title:** “How to share what you cannot see – a study of the sharing of tacit knowledge within PricewaterhouseCoopers”.

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**Subject:** Business Economics

**Abstract:** The necessity of managing the tacit knowledge sharing is becoming more significant because of the upcoming demographic changes facing companies all over the industrialized part of the world. The so called baby boomers born in the middle part of the 20th century will soon reach the retirement age and this is anticipated to create an extensive loss of knowledge.

In light of that, companies face a dilemma when over bridging the knowledge gap between their more experienced senior employees who have accumulated plenty of knowledge and the novel ones. It opens the discussion concerning how to “capture” that knowledge since it is the competitive advantage in the contemporary world. This is particularly sensible for knowledge-based firms which are the main focus of this study.

Scholars have developed different approaches of the knowledge sharing phenomenon, but still there is a lack of understanding regarding how this abstract process should be supported in a daily basis.

This work investigates the factors that aid or hinder the knowledge process within consulting firms as a prerequisite to reach a greater awareness of the particular setting that will foster the sharing. Supported by a theoretical background, this was accomplished by following a systems approach, favoring qualitative methods. The empirical data was collected using semi-structured qualitative interviews within the headquarter offices of Pricewaterhouse Coopers in Stockholm, Sweden.

The exploratory results suggest that by converging specific aspects, consulting firms can overcome the most common barriers when sharing knowledge transfer. Furthermore, it is pointed out the positive conditions a firm has to develop as well as Theoretical and Managerial implications.

**Keywords:** Knowledge, Tacit knowledge, Knowledge Management, Trust, Consultant firms, Sensemaking, Knowledge sharing
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Kalmar, May 2010.

Diana Carolina Puerto                                                    Catrin Stighammar
**ABBREVIATIONS**

KIF – Knowledge Intensive Firm  
PwC – PricewaterhouseCoopers  
FS – Financial Services  
TICE - Technology, Information, Communications and Entertainment  
IG&U - Infrastructure, Government, and Utilities  
CIPS - Consumer and Industrial Products and Services  
IT – Information Technologies
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1. INTRODUCTION

The purpose of this chapter is to introduce our field of study as well as the scope of our research. Firstly, the significance of tacit knowledge as a strategic resource for the intensive knowledge firms is presented. Likewise, the challenge of sharing this knowledge is also illustrated. The phenomenon is problematized and thus, the research question as well as the main aims of this study are stated.

1.1 Incentive to Study Knowledge

As master students striving to become corporate leaders we believe it is essential to know what factors that will be critical for company success in the future. During our management and leadership studies we have developed an understanding towards knowledge, how to acquire it and how to transfer it to our followers. Moreover we believe that knowledge will become increasingly important when conducting business as the world is globalizing and competition among companies intensifies.

We both grew up during what is known as the information age and are therefore familiar with technology and its impact on business. Instead of focusing on how explicit knowledge can be transferred using different information systems, as was the focus of many studies during the 20th century, we decided to look at the sharing of tacit knowledge. This type of knowledge we consider more interesting as it is based on experience, more complex to share and the sharing process involves interaction between people. These characteristics of tacit knowledge demand a specific sharing process which we want to construe in the context of consultancy firms.

1.2 Era of Knowledge

In the new economy companies must be able to operate in a business environment where conditions change rapidly. The technological development and its result in improved transportation and communication has affected the competitive arena for doing business (Davenport & Prusak 1998). This forces companies to continuously evaluate their external and internal environment and respond to new opportunities and threats. Nonaka and Hirotaka (1995) as well as Davenport and Prusak (1998) points out how uncertainty has become a
natural state for organizations and according to them, knowledge is the only solution to this problem.

The new focus on knowledge as a valuable organizational asset has developed during the 20th century (Davenport & Prusak, 1998, Sveiby, 1991). Nonaka and Ichijo (2007) state that knowledge is not only a valuable asset, it is in today’s society one of the greatest competitive advantages for companies. With the right knowledge, organizations can innovate and act proactive instead of reactive (De Witt & Meyer 2004).

To constantly respond to market changes would demand a flexible organization with a broad resource base. By utilizing knowledge as a resource instead of a support system the company can create a sustainable advantage in a time when constant development of other production factors is needed to stay ahead of the market.

The reason for the sustainability is that when knowledge is imbedded in an organization’s human relations and working processes, it constructs an advantage almost impossible for competitors to replicate (Alvesson 2004). This is something that we believe is crucial for a company’s performance.

The condition for successfully developing such intangible resource base (De Witt & Meyer 2004) is to construct an organization willing and able to acquire knowledge and share it both in the organizations internal and external environment. The nature of knowledge renders the possibility for some knowledge to be stored but others not. Hence the challenge for the organization is to facilitate the development of knowledge within the firm and see to that it is not lost due to personnel leaving.

1.3 Knowledge as a Service

Sveiby and Risling (1986) distinguish between service firms and knowledge firms. A firm who sells a service can have a standardized solution and the customers do not demand a high degree of adaptation although the service provided is based upon knowledge. The service of a knowledge firm on the other hand is characterized by high adaptation to the customers will and such firm need creativity and skills for complex problem solving in order to perform the service successfully.
Knowledge intensive firms (KIF) are organizations with knowledge as the main asset (Creplet et al., 2001). Within the knowledge society this type of firms has increased through an expansion of the service tertiary. One example of KIF is consultancy firms.

Creplet et al. (2001) explains the importance of knowledge in the process of a consultant’s work as it is dependent on the consultant’s own ability to create knowledge through codification of information. In every encounter with a client and its problem a consultant either uses knowledge previously acquired from experiences, tacit knowledge, or formulates new knowledge by gathering and analysing information. This knowledge then guides the consultant’s actions and the outcome of the commission. The knowledge used is dependent on the situation and the consultants own frame of reference and the solutions can therefore not to any high degree be standardized (Sveiby & Risling 1986).

McLarty and Robinson (1998) describe three factors with which a client can base its choice of consultant: expertise, experience and efficiency. Expertise can on the one hand be acquired through explicit knowledge which is easily codified and transferred through means as databases or documents (Davenport & Prusak 1998). Expertise can also develop through experiences and the creation of tacit knowledge. Davenport and Prusak (1998) support this by highlighting the value of experience as a knowledge creator. Efficiency is achieved when the consultant holds a mix of both expertise and experience. Through experience the consultant can prove knowledge and thereby improve its skills in problem solving and the creation of customer relations. The type of knowledge acquired through experiences is therefore important for a consultant’s success.

The consequence of experiential knowledge’s tacit nature is that the sharing process becomes complex and KIF has to develop new means to share experiences if they want to increase the overall efficiency of the organization. For this reason, knowledge management, including knowledge transfer, has become an important activity within knowledge firms (Nonaka & Ichijo 2007).
1.4 Managing Knowledge within a Knowledge Firm

Sveiby (1991) identifies ten success factors for knowledge firms which can all be related to knowledge.

1. Respect for knowledge
2. Systems to keep the knowledge within the organization
3. Process for replacing key persons
4. Firm cultural structures – according to us this increases the understanding among employees and simplifies the transfer of knowledge
5. A management who participates in everyday business
6. Customer perceived quality and quality control – with effective knowledge transfer the company’s performance can rise (explanation found in 1.5)
7. Combination of expertise and entrepreneurship
8. Strong, well defined business idea
9. Concentrate on one area of knowledge
10. Emphasise in developing employees

In addition we consider them to be important for both explicit and tacit knowledge although the two types of knowledge differ widely in their handling.

To share explicit knowledge through technological systems has become widely used among companies. These means of transfer developed in the early 1990’s with the lounge of the World Wide Web (Nonaka & Ichijo 2007). Tacit knowledge was at this stage not the focus of companies but over time the value of experiences has become realized and organizations have increasingly tried to manage even this type of knowledge sharing.

For a successful replacement of a key person to occur within a consulting firm the individual tacit knowledge that person possesses needs to be shared to the successor through interaction. Davenport and Prusak (1998, p. 88) give their solution for sharing tacit knowledge effectively by stating: “hire smart people and let them talk to one another”. This type of knowledge sharing does occur within KIF but are often unstructured and inaccurate due to the complexity of tacit knowledge (Davenport & Prusak 1998).
1.5 Research Problem

Consultancy firms have a major role as knowledge sharers within the new knowledge based society. The efficiency of these firms to share knowledge has an impact not only inside the organization but also on the overall economic development (Lahti & Beyerlein 2000).

Consultancy companies are aware of the value of knowledge and knowledge management has become an important part of consultancy firms on both strategic and operational level (Nonaka & Ichijo 2007). The issue of knowledge management in consultancy firms is not concerning the transfer of explicit knowledge but the absence of understanding for how to share tacit knowledge in an efficient way.

Our research problem concerns the process of sharing tacit knowledge and, according to us, the absence in theory of how this process should be best supported in practice.

Gavin (1998), Kleiner and Roth (1998) believes that the problem with tacit knowledge is that it is hard to share without interaction due to the difficulty of articulating this type of knowledge. Once a project has ended the tacit knowledge gained is neglected by the organization and the sharing that does occur is solely of explicit knowledge. Once a senior consultant leaves the firm, the tacit knowledge of that person is lost to the organization. As a consequence consultancy firms’ invest working hours enabling novel consultants to acquire the same knowledge through practical experience as they could have been given by a senior consultant prior to that persons leave.

If no tacit knowledge sharing occurs within a consulting firm, experienced consultants create a large pool of knowledge which cannot be used for the development of the organization as a whole. The competitive advantage from having experienced people within the organization becomes untenable and the organization renders the risk of losing its ability of innovation and successful proactive market initiatives.

To create a highly efficient consulting firm, the knowledge shared within the organization must consist of both explicit and tacit knowledge. For this reason consultancy firms need
practises for sharing tacit knowledge which can be used as part of their knowledge management.

The sharing of tacit knowledge depends on the communication between employees, in this case, consultants. This communication process is affected by, among others, the organizational culture, the level of attention given to tacit knowledge by influencing people, the willingness of the consultants to share knowledge and the relationship between the interacting consultants (Davenport & Prusak, 1998; Nonaka & Ichijo, 2007, Sveiby & Risling, 1986, Sveiby, 1991).

The process of sharing tacit knowledge is hence dependent on both the context of the process and the individuals involved in the sharing. This requires that the entire organization acts as a knowledge creating and sharing system.

1.6 Significance of the Problem

The place of knowledge as the most important competitive advantage for consultancy firms has created new challenges as the competition in the global market increases. The firms need to manage knowledge in order to stay competitive and if the process of sharing knowledge fails, the survival of organizations is at risk.

The necessity of managing the sharing of tacit knowledge is becoming more significant because of the upcoming demographic changes facing companies all over the industrialized part of the world. The so called baby boomers born in the middle part of the 20th century will soon reach the retirement age and this is anticipated to create an extensive loss of knowledge (Nonaka & Ichijo 2007; De Long 2004). As can be seen in Fig. 1 the level of performance of a consultant is at it’s highest during the senior and mentor stage of a consultants career (Sveiby & Risling 1986).
When the baby boomers leave the market the performance level of consultancy firms will decrease if the organization is incapable of over bridging the knowledge gap to the less experienced consultants. The relationship between performance drop and the lack of experiential knowledge can be explained by the beginner mistakes novel consultants make concerning work methods and quality (De Long 2004).

By creating an organizational structure which fosters the sharing of tacit knowledge a consultancy firm can preserve the competitive advantage and performance level regardless of experienced consultants leaving.

1.7 Research Question

Since the process of sharing tacit knowledge is complex, socially constructed and imbedded in the organizations culture it is intriguing to reflect upon both contextual and individual factors influencing the process. Hence our research question is:

*What factors aid or hinder the process of sharing tacit knowledge within a consulting firm?*
1.8 Aim of the Study

The main aim of this study is to explain and illuminate the phenomenon of sharing tacit knowledge within a consulting firm. Since employees are the main carriers of knowledge in business we want to explore the process of sharing tacit knowledge between consultants. Another aim is to create a model over the process of tacit knowledge sharing.

1.9 Delimitations

A limitation of this study is that the client aspect has been excluded. As tacit knowledge sharing in itself is said to be a complex, context dependent process it was necessary to limit the context of this study and therefore the internal environment of a consulting firm became the setting for analysis.

We deliberately also excluded other countries than Sweden as we noticed, after consulting with people with relevant experience from Colombia and England, that the knowledge management practises was significantly different depending on nation. We wanted to avoid the problematic of depicting what factors that was related to the culture of a country as these might be hard to distinguish. The limitation to one country gave us the possibility to focus on the organizational factors instead of country specific.

1.10 Thesis Disposition

The structure of this thesis is following a traditional approach divided into five sections beginning with an introduction. This is followed by a methodology chapter providing the procedure for the study explaining our methodological choices. Our theoretical framework then introduces the theoretical concepts within our field of study and how they are interpreted by different researchers. The main concepts are incorporated into a model which concludes the theoretical chapter and brings the frame for the discussion and interpretation as is conducted in chapter four. This chapter brings the voice of theory, empirical data and our interpretations together, ending in chapter five which presents the main conclusions and their implications in theory and in practice.
2. METHODOLOGY

This chapter aims to describe the way in which the research for this study is been conducted since it affects the type of results and the extent in which would be possible to generalize. It incorporates the research strategy, methods, and the research process the authors are using so far. Finally, a discussion regarding collection, interpretation of data as well as the validity and reliability are also presented.

In order to execute our research we found it necessary to firstly outline a methodological frame. This frame will facilitate the interpretation of reality that will later on influence the perspective of the outcome and the outcome itself. In addition, the selected methodology will provide us with a procedure to practice the research in an organized manner. The further advantage of having selected an approach is consequently to simplify the selection of proper techniques to acquire knowledge. Following this process will ensure that our research is conducted in the way it was meant.

2.1 Research and Theory

The transfer of tacit knowledge can be seen as a system or a process. In order to study this phenomenon we have decided to use a deductive approach to theory. Bryman and Bell (2007) explain the research procedure as deducing a hypothesis from the existing theory and then use empirical data to either reject or prove the hypothesis.

Considering the nature of tacit knowledge transfer we have decided not to create a hypothesis. We will study the theory to become familiar with the context in which tacit knowledge is transferred and to find suitable concepts for guiding our empirical study. Arbnor and Bjerke (2009) emphasize on the value of distinguishing between causal relations and finality relations since they are determined in different research settings. Causal relations can be identified using an explanatory study of already existing theory while finality relations are determined through empirical evidence.

The aim of our study is to understand finality relations by determining the characteristics of the process of sharing tacit knowledge. We will use the deductive approach to formulate
potential finality reasons which is in line with the first step of systems research according to Arbnor and Bjerke (2009).

2.2 Epistemological – View of Knowledge

The epistemology of interpretivism is a method applicable to a study of the social world. This method allows a researcher to interpret the behaviour of humans and is hence known as hermeneutic position to knowledge. (Bryman & Bell 2007)

Since the transfer of tacit knowledge is dependent on social interaction, in this case between consultants, and carried out in a social context the focus lies on the behaviour of humans. The approach of interpretivism renders us the possibility of grasping the subjective meaning of people’s actions regarding the process of transferring tacit knowledge. We are then able to find the underlying factors to formulate concrete finality relations.

As a contrast to positivism and realism the interpretivism stress the view of reality as dependent on the interpretation of the researcher (Arbnor & Bjerke 2009). The view of reality is highly dependent on the researchers own frame of reference. By developing our frame of reference through a deductive research approach we enable the result of this study to explain and understand a reality as comprehensive as possible.

2.3 Ontological Position

Bryman and Bell (2007) refer to two positions within social ontology, objectivism and constructionism. Objectivism implies that social phenomena is unaffected by social actors. They are both parts of social reality but actors have to adapt to the rules existing within social entities, they cannot set the rules themselves. According to constructivism, on the other hand, the meaning of social reality is constructed through interaction of and meanings created by actors. (Bryman & Bell 2007)

The transfer of tacit knowledge is a social phenomenon where the actors within the organization create the process through interaction (Davenport & Prusak, 1998; Clerke &
Rollo 2001; Smith 2001; Zack 1999). With a research aim to create an understanding of the performance of organisations by studying the behaviour of actors within the entity our study goes in line with having constructivism as the ontological position.

Constructivism allows for actors to change social phenomena by constructing new meanings of reality (Bryman & Bell 2007). When studying the behaviour of consultants regarding the transfer of tacit knowledge it is important to acknowledge that social entities are possible to change. With an ontological position of constructivism the concept of a learning organization can be applied to the study and also the notion of sense making, a concept further explained in section three of this report.

2.4 Methodological Approach

Since the aim of our study is to analyze the process of tacit knowledge transfer we need an approach which allows us to look at both the whole, as in the process, and the factors affecting the process. We also strive at finding new information which does not necessary have to be generalized in order to create value. Fisher (2007) distinguishes between breadth and depth regarding study approach and we consider a more in-depth understanding to be more beneficial for our research.

The systems view opens up the opportunity to both understand and explain the reality. It also acknowledges the existence of objective as well as subjective elements. According to this view, reality is made up of different systems where both components and their relationship among them matter for the result. For this reason the focus of a systems view lies heavily on the context of the system to be studied. (Arbnor & Bjerke 2009)

We will carry out our study in the context of organizations which are, according to us, dynamic systems. This view-point prepares us for a research environment where variables can be difficult to test; instead we hope to find new ones. Corbin and Strauss (2008) mention this stand to variables as a reason for choosing a qualititative method and this is also recommended by Arbnor and Bjerke (2009) when having a systems approach to the research. For this reason we believe that the methodological approach of the systems view and the methods most suitable for gathering our data will be compatible.
Furthermore, we aim at presenting a model of the relationship between different factors affecting the process of transferring tacit knowledge. Arbnor and Bjerke (2009) illustrate this as a typical theoretical result culminating from the systems view.

The main trait of the systems view is that reality does not consist of cause-effect relationships static over time. Instead there are interdependent relationships that changes with the context. The systems view emphasizes the value of history in order to create understanding of a system and its environmental changes by using a common systems language. (Arbnor & Bjerke 2009) To read existing theory will, as mentioned, be our starting point.

2.5 Research Strategy

Within the social society two main research strategies can be found: quantitative and qualitative (Bryman & Bell 2007). Quantitative research concerns counting and measuring data to conclude a result (Gillham 2000). Bryman and Bell (2007) explain that within a quantitative study it is important to transform information into quantifiable data. By coding the information it can be processed by a computer which will in turn provide the researcher with a basis for further analysis.

A qualitative approach can also concern data which can be processed but only to a limited extent. According to Bryman and Bell (2007) this research strategy value words more than quantifiable data and hence is more suitable when searching for meaning than for facts. The focus of this kind of research is to describe and interpret results in the search for underlying reasons to illuminate an issue (Gillham 2000). This can be done by gathering qualitative data consisting of people’s feelings, perceptions and experiences.

We have decided to use a qualitative strategy for our research and this can be justified by our exploratory research purpose concerning consultants’ attitudes and feelings. Moreover, we want to create an understanding of what factors that affects the transfer of tacit knowledge by illuminating the process and the underlying reasons for the transfer to occur.
Gillham (2000) argues that one of the main advantages with a qualitative approach is that the researcher can get insight in the informal reality of humans. For us to answer our research question it is crucial that we provide findings acquired from people inside the consulting firm who experience the context from where our research issue is drawn.

2.6 Research Design

The process of transferring tacit knowledge is a phenomenon which cannot be separated from its environment. Thus the study of the process is best conducted in the context where the transfer is made. Yin (2009) mentions the above criteria for choosing a case study as the method of research. Moreover he mentions that the result gained from a case study depends on more variables than can be processed as data. The last criteria for choosing a case study is that theory creates the frame for selecting which data to search for and how the data shall be analyzed.

Due to our deductive approach to the research we will use theory to guide our study. As we are searching for underlying factors hidden within the internal context of a consulting firm the amount of data and the variety we will find cannot be restrained prior to the study. The method of a case study will create enough frame to keep the focus upon the aim of the study without limiting the data collection.

According to Yin (2009) a case study allows a researcher to gather empirical multiple data which creates in-depth knowledge of a certain phenomena. To guarantee a representative result, the systems view emphasizes on the value of having all the parts to create a whole picture for understanding (Arnbor & Bjerke 2009). The importance for us is that we gain enough knowledge through our research to create an understanding of the whole process of transferring tacit knowledge.

As the case study method is compatible with both our methodological approach and our aim of the study we consider this method to be most suitable for our research. A case study can be conducted as single-case, multiple-case, holistic and imbedded (Yin 2009). The different methods decide the design of the study and they can be combined to create the most suitable
design. An efficient design allows the researcher to gather and analyze information and draw conclusions which can answer the questions of the research.

Our choice of case study design can be explained using our research context and units for analysis. We are conducting a study within the context of consulting firms and the units of analysis will be consultants within this firm. Following the wording of Yin (2003) the research project will be conducted as a single-case study with multiple units of analysis. Gillham (2000) explain that a case study allows the researcher to gain evidence within the case setting and, for us; choosing only one context creates a frame for future analysis.

The design that will guide our research is an embedded case study design. Yin (2003) explains that this design focus on one single unit, the organizational context, and then allows the researcher to target multiple units within this setting, in our case consultants. This will provide us with an overall model of the transfer of tacit knowledge within the organization and also individual perceptions of consultants enhancing the understanding of the process.

Using the systems approach the organization can be referred to as a super system and the process for transferring tacit knowledge a subsystem (Arbnor & Bjerke 2009). When deciding on the chosen design we have considered one pitfall which, according to Yin (2003), is that the case study runs the risk of focusing only upon the subsystems and forget the larger unit of analysis. We will oppose this by keeping our main objective of creating a model of the process of transferring tacit knowledge. The cognitive inputs we will receive from consultants will aid this objective but the model cannot be created without the understanding of the super system.

2.6.1 Case Selection

When deciding which case to use for a study it is important to choose one that will most likely illuminate the research questions (Yin 2003). By studying consulting firms we have a setting for the study where knowledge is a main resource within the organization and where the transfer of knowledge is done by consultants within the context. We believe this to be an appropriate case since the aim is to study the knowledge transfer of tacit knowledge and as mentioned earlier this process is too embedded in the organization to be studied elsewhere.
We have chosen to use a single-case design and our rationale for this goes in line with Yin's (2003) recommendations. He states that for one case to give a satisfactory result the case itself has to be representative. Our choice of consultancy firm for this study is a successful, global company with long experience in the market. By having an established position among consulting firms we assume this company to hold tacit knowledge and hence, a need to share this within the organization.

2.6.2 PricewaterhouseCoopers

PricewaterhouseCoopers (PwC) is a worldwide professional services firm which has more than 163,000 employees in 151 countries. The company was shaped in the way it is currently known in year 1998 as a result from the merge between Price Waterhouse and Coopers & Lybrand, both founded in London. PwC has three main service lines: Assurance, Tax, and Advisory. Yet, the firm has developed service lines according to each country by broad specializations such as Financial Services (FS); Technology, Information, Communications and Entertainment (TICE); Infrastructure, Government, and Utilities (IG&U); and Consumer and Industrial Products and Services (CIPS).

PwC has a very competitive training program and that is one reason behind its place as number 58 among a list of “100 Best Companies to Work For” which was conducted by the Fortune’s in 2009.\(^1\) This is due to the fact that, as a knowledge-intensive firm, the output of its employees is its core product.

PricewaterhouseCoopers Sweden

As the case for this study is PwC’s office in Stockholm, Sweden, we will present some specific facts for PwC in Sweden as well as the working conditions in the office in Stockholm.

As of current year PwC is the leading professional service firm in Sweden within auditing, accounting and consulting and it has more than 3600 employees (PricewaterhouseCoopers i Sverige AB 2009). The service range includes auditing, accounting, risk management, tax

advisory services, corporate finance and advisory services. The clients reach from big international companies to non-profit organizations.

The objective of PwC is to increase its clients’ competitiveness by providing them with support. Auditing is the core of the business but one of the strongest competitive advantages of PwC is its broad range of expertise.

The formal power structure within PwC is illustrated by Fig. 2 below.

![Figure 2 - Formal Power Structure of PwC](source: PwC)

The knowledge management department in PwC Stockholm was established only a few months ago and is currently existing of merely one knowledge manager. He is responsible for enhancing the knowledge management at PwC Stockholm and the aim is to render the implementation of a knowledge management strategy within PwC Sweden.

2.7 Data Collection

The process of collecting data within a research is crucial for the quality standards of the study (Yin 2003). Within a case study research the sub methods used to collect data are primary qualitative (Gillham 2000). These methods comply with the complexity of
identifying different and even conflicting meanings when studying a real life case (Bryman & Bell 2007; Gillham 2000; Bjerke & Arbnor 2009).

To use different methods but concentrating on the same issue is called a mixed-, or multi-method approach (Bryman & Bell 2007; Gillham 2000). Yin (2003) emphasize on retaining the focus of the study when collecting data, hence we have used our chosen approach of a systems view as a guide for suitable data collection methods.

Our data will be collected using both secondary and primary sources. The secondary information will be collected through documents and the primary by conducting interviews with people within a consulting firm. These methods meet the requirements of a systems approach by allowing a collection of information from within the real system. The different methods and their influence on our study will now be explained further.

2.7.1 Documents

The secondary information will be gathered through documents. Gillham (2000) states that documents are advantageous when searching for the working methods of a company since the information easily can be accessed and compared. Among other working methods he mentions training, integration and teamwork, all which are of interest for our study.

The documents we will use are produced by the consulting firm we are studying. The reason for not searching for an external view of the research context is in line with the principle of delimitation within the systems view (Bjerke & Arbnor 2009). The implication of this principle and its influence on our study was explained in 1.8 in this report.

Bryman and Bell (2007) refer to websites as a form of documents. For our analysis of the super system we will explore the information on our chosen consulting firm's website together with written documents handed to us by the firm.
2.7.2 Interviews

Interviewing is a qualitative method which allows a researcher to see the perspective of those involved (Gillham 2000). We will use interviews to gather the primary information for this research. The usefulness of the information depends for us on how much the answers from interviewees can be said to reflect their own individual interpretation of the subsystem of transferring tacit knowledge and of the super system.

By using a semi structured interview method we can create a general frame for the interview but still retain the flexibility which an interview brings. Bryman and Bell (2007) pin point this latitude to ask further questions as one of the main advantages with interviews. Others are personal answers and the ability to receive detailed information. The richness of details will affect the magnifying level (Arnbor & Bjerke 2009) of the result, in this case an interpretative model over tacit knowledge transfer. Our willingness to receive detailed information is a further incentive to use interviews only structured to a certain degree.

The underlying reason for not choosing unstructured interviews where we would merely provide a list of topics to discuss with the interviewee (Bryman & Bell 2007) is the nature of our research problem. Since the subsystem of transferring tacit knowledge has not yet been interpreted through a model, the risk for the interviewee to confuse tacit with explicit knowledge might interfere the usefulness of the information and hence decrease the validity of the result.

2.7.3 Profile of Respondents

In the initial stage we had contact with the knowledge manager, Mattias Eklund, at PwC Stockholm and during meetings he provided us with a good understanding of PwC Sweden regarding knowledge management and which areas he would like the study to focus on. His empirical insight has been used to illuminate the issues facing PwC and hence supported us in the construction of the interview guide.
To gather empirical data we conducted personal interviews with a total of 14 consultants and advisors working for PwC Stockholm. The interviews were held at the office of PwC Stockholm and went on in average 45 minutes. The employees represented different service lines and level of experience to provide us with as many aspects as possible. What most of them had in common was that they were chosen because of their position as either manager or team leader for a business unit or group of employees. By interviewing these people working at this level we were able to ensure that we could receive answers regarding interaction possibilities with both people further down in the organization as well as higher. All the interviews were recorded to increase the authenticity of the empirical analysis.

2.8 Data Interpretation

We considered the choice of presenting the empirical data prior to the analysis as it is a common practise in research reports. However, we wanted to avoid the risk of repeating ourselves and instead we used some quotes of our interviewees and also some findings we interpreted to be of importance for the study. With this we managed to highlight the answers we found general among our representatives at PwC and simultaneously we could interpret them with the use of theory. To conduct our analysis according to our deductive research approach the result was to blend both the voice of theory with our own as we presented the empirical findings.

To have an ongoing discussion of the empirical findings we furthermore found necessary as the empirical data gave us multiple factors affecting the process of sharing tacit knowledge. This combined with the complexity of knowledge as a concept encouraged us to believe that a combined analysis with presentation of empirical data would enhance the readers understanding of the conclusions. We were able to explain, based on our own interpretation, the links between our empirical data and theoretical framework.

Moreover we could group our findings according to the theoretical concepts which furthermore was beneficial for the overall understanding and connection to the following chapter with main conclusions.
2.9 Quality standards

Yin (2003) mentions validity (internal and external) and reliability (internal and external) as means to withhold quality standards. Internal validity concerns causal relationships and will therefore not be applicable for this study.

Due to our qualitative research design we acknowledge the risk for subjective judgments of data collection. By using a combination of interviews and documents we can develop a converging line of inquiry and thereby increase the research’s validity (Yin 2003).

By conducting a single case study we are aware that the external validity can be limited. Nevertheless the size, experience and success of the organization studied we hope will increase the ability to generalize our study findings. Since generalization of qualitative data continues to be a major hinder within quality research (Yin 2003) we will recommend the result to be tested in other settings to increase the validity through replication.

To increase the openness of our case study we will document the findings from interviews through transcript. We will also have people in our surroundings to read this report to see to that the data collected is relevant for our study purpose.

Yin (2003) refers to the connection between introduction and findings as a chain of evidence. If the same research process arrives at the same findings the reliability can be said to be good. As we are conducting a qualitative study we do not aim at creating a chain of evidence as the data is highly contextual and subjective. We have instead gathered data from several interviewees to find connections between their answers and in that sense tried to increase the reliability of our findings.
3. THEORETICAL FRAMEWORK

This chapter aims to inspect the academic development concerning this topic so far and to expand our understanding in relation to the object of study. The literature review concerning the theoretical concepts related to the tacit knowledge transfer is illustrated. Likewise, it also proves the factors to take in consideration when analyzing the transference as well as the difference of significance that each factor has. Finally, a discussion regarding our theoretical findings as well as the research model developed to conduct our inquiry is offered.

3.1 The issue of Knowledge

Before examining some approaches concerning the issue of knowledge sharing that have been identified in the prior literature, it would be wise to discuss the concept itself since the universe of concepts regarding knowledge is wide.

This notion though, can be related to the ideas of facts, data, judgment, communication, information and so on. It is also used to define either the input or the output of complex intellectual, perceptual, expressive practices (Kalling & Styhre 2003). Likewise, Liebeskind (cited in Kalling & Styhre 2003, p. 57) defines knowledge as “information whose validity has been established through test of proof”. However, it has had several epistemological transformations throughout history.

The concept of knowledge itself and several bright minds were influenced by Plato’s and Aristotle’s reasoning. They postulated their ideal based on the belief that human capacity was able to achieve the complete understanding of the whole reality that was not totally apprehensible, explicit or clear; that is, an exacerbated reliance on the human being (Morton 2002).

In the late eighteenth century and early nineteenth a more dynamic proposal regarding dialectic confrontation was proposed by the German philosopher Friedrich Hegel. He suggested that “absolute truth” could be attained through a complete synthesis of all knowledge. This proposition was reduced by Marx in his historical materialism.

This enthusiastic anthropological faith became popular during the eighteenth century and led to what is known as the historical period of the Enlightenment. The amazing discoveries in pure sciences during this century encouraged the confidence of mankind in his power of reasoning. Thus, knowledge was conceived as rational and formally, explicitly and totally verifiable as well as articulated and explicit in its conclusions (Morton 2002).
The first decade of the twentieth century, however, made clear that the ideals that the Enlightenment predicted were far from completion. In fact, the thinking systems that were acclaimed rationally and the technology that will support the humanity progress turned into oppressive ideologies and massive destruction weapons. The continuous disclamation of qualitative concepts that were assumed as subjective and arbitrary brought dangerously simplistic and distorted truths (Mead 2007). Furthermore, the modern concept of knowledge hence limited knowledge as to what might be perceived and articulated exclusively.

In light of this, the Hungarian chemist and philosopher, Michael Polanyi proposed a concept of knowledge that indicated a turning point in the generation of knowledge. He suggested that what guides inquiry in every field is what he named as *tacit insinuation* or *intuition*, understood as the trained capacity developed throughout the immersion in a discipline during several years (Polanyi 1958). This leads to store a colossal amount of knowledge which one is not aware even if it is used by the tacit conscious of everyone. This knowledge can also be named as Procedural knowledge which basically guides how to perform activities, it means, *know-how*. Unlike procedural knowledge, declarative knowledge describes the awareness of information in general. In other words, Know-that (Colman 2001).

Hence, Polanyi’s burst the established preconception with his concept of *personal knowledge* stating that, as it is built by humans, it always contains feelings and passion. In fact, in the sense Polanyi refers to, the notion of *knowledge transfer* would not be entirely accurate as knowledge is reconstructed by the receptor rather than moved from a location to another as if it were a good (Sveiby 1996). Each person hence adapts and understands the knowledge in a different manner as it is processed accordance to the own experiences. As a result, as he famously claimed, “we know more than we can tell” due to language is not enough to make knowledge explicit. Anyhow, because of this abstraction, some authors have developed new approaches to explore the intangibility of knowledge.

More recently, some other author as Bell (1973) adds the idea of knowledge as susceptible of being transferred: “a set of organized statements of facts or ideas, presenting a reasoning, judgment or an experimental result, which is transmitted to others through some communication medium in some systematic form” (cited in Kalling & Styhre 2003, p. 57). Although this concept satisfies largely the purposes of this study it could be enriched with some other useful perceptions from other authors.

For instance, Kalling and Styhre (2003) states that the elementary forms of knowledge are information and data, and that it also have become an emergent property. Unlike data, which represents facts or observations without a specific meaning, information arises when it is located in a meaningful context. When information makes sense through understanding it
becomes Knowledge. One believes and values knowledge based on the meaningfully organized sum of information that he/she has learned or deduced (Shehabat et al. 2009). Thus, knowledge, like information, is about meaning.

Figure 3 - Knowledge Generation Process
Source: Our own

Another feature of knowledge is that it is context-specific and relational (Nonaka & Hirotaka 1995). Haraway (1991) calls it as situational. This is due to the fact that knowledge becomes knowledge depending on a particular point of view. Gherardi and Nicolini (2001, p. 44) affirm that “knowledge is made by a specific social community belonging to a network of power relations, and not by a world consisting purely of ideas. Hence, no knowledge is universal or supreme; instead, all knowledge is produced within social, historical, and linguistic relations grounded in specific forms of conflict and the division of labor”. Thus, we agree upon that there is not knowledge per se. It is developed by consensus based upon negotiated meanings (Weick 1995).

Given what was said above, knowledge is in some extent intangible. It is also what a society accepts as true and legitimate, or collective beliefs that become truths (Foucault 1972). As Deleuze (cited in Kalling & Styhre 2003 p. 70) states “knowledge is what happen in-between the seeing and the saying”. For Wood, (2002, p. 153) “knowledge is not a commodity ‘out there’ or its movement a question of the starting or finishing of use or production. Rather it is the elusive subject of what happens in-between”. Despite the fact that knowledge is spread throughout the organization it is difficult to locate it at a specific point. This abstraction together with its acquired importance in the twentieth century, make this issue an inquiry field of undoubted importance to the contemporary world.
3.2 The Notion of the Knowledge Society

Novel knowledge and technical advances have been always present in the human history. What has been unique concerning innovations in this century is the speed in which they have been diffused across the nations transcending social, cultural and geographical barriers (Drucker 1993). According to Drucker’s reasoning, the change in the meaning of knowledge has occurred through several fundamental phases where the relevance of the production factors has been modified. The Industrial Revolution gave rise to new modes of production and new social classes. Also, the Productivity Revolution increased the purchasing power raising the quality of life and thus the time devoted to leisure. These changes made the production factors to modify: first, the labour and the capital where the most important ones and then, later on, capital and energy were. (Oprea 2007).

However, wealth could no longer be created by the sustained increase by the productivity of manual workers. Therefore, what is relevant now is the productivity of non-manual workers. In fact, the traditional production factors as natural resources, labor or capital have not disappear but they have became secondary, turning Knowledge into the key resource nowadays (Drucker 1993). Thus, the modern age, characterized by a massive belief in technoscience and the relentless prevalence of rationality is coming near to a turning point or an end (Vattimo 1992).

The transition into the post-industrial society has been discussed in a considerable number of studies. All this theories, ideas and models recognize that the new regime contemporary society is approaching to something that differs from the earlier ones based on the new concept of knowledge (Kalling & Styhre 2003). Knowledge is now seen from a utilitarian perspective where it must be applied in order to produce social and economic results (Drucker 1993). The paradigm has permeated different disciplines including Management. Today, general knowledge has given way to plural disciplines where specialists are in demand. At this juncture, educated people must be not only competent in highly specialized knowledge but accountable for the application and performance of knowledge (Drucker 1993).
Knowledge management is a relatively recent field of study within organizational theory. It is based on the new considerations of the post-capitalist society. Seeing that the only remaining exploitable resources are intangible they became the new objects of study. Thus, the growing interest in concepts such as tacit, entrepreneurship, emotions, knowledge or creativity have turned into highly valuable resources.

However, what knowledge management seeks is not only making them visible but problematize the way these are being used as means to achieve and maintain sustainable advantages (Davenport & Prusak 1998). The challenge is, as Kalling states, “to handle what cannot be fully captured” (Kalling & Styhre 2003 p. 13).

The two main objectives of Knowledge management are to handle pre-existing knowledge resources within the company and, furthermore, generate novel knowledge able to produce sustainable advantages for the future. Unlike previous paradigms which were concerning quality or the organization structure, Knowledge Management appears less functionalist and more abstract. Hence, knowledge management is regarded for some authors as an organizational resource as well as a practice.

3.3 Knowledge Management

To explain the role of knowledge management within learning organisations we must first define what it means, since we believe all organizations are learning organizations. Stata (1989, cited in Gavin 1998. p. 78) states that “organizational learning occurs through shared insights, knowledge and mental models ... [and] builds on past knowledge and experience – that is, on memory”.

One of the most important skills of an organisation is according to Gavin (1998) to learn from past experiences. This can only be done as a part of knowledge management if everyone within an organization takes part in transferring knowledge between employees or organizational units. Davenport and Prusak (1998) also emphasise on the value of having the entire organization to take part in the knowledge management. If knowledge is transferred internally employees can base their decisions on the knowledge created or acquired by another employee and thereby the overall performance of a company can improve.
The challenge is that the transfer of tacit knowledge often is neglected once a project has ended. Kleiner and Roth (1998) explain that employees often have insight regarding the overall performance of the project and its result. In the best case project specific knowledge is collected in a report and handed to management who analyse it and acquire the knowledge. The fault is that tacit knowledge is not transferred within the organisation and therefore lessons of the past are lost. So, the challenges is not just to retain needless information from the past but to capture functional knowledge, to develop dynamics of access and use, as well as allowing the lessons from the past to impact positively future decisions. Otherwise, the storage would be simply waste of resources.

In light of this, several authors have developed knowledge management tools and strategies. Hansen (cited in Ribiere 2009) distinguishes two main approaches concerning Knowledge management: codification versus personalization. The **codification strategy** emphasizes on the use of Information technologies -IT- in order to store knowledge in databases. There hence it can be accessed by any member of the staff. It is a people-to-document approach and benefits highly the reuse of knowledge. It is also called as the cognitive dimension model, the collective dimension, distributive applications, the document-centred approach and the technological approach.

On the other hand, the **personalization strategy** prioritizes the development of networks to link people to promote the transmission of tacit knowledge. As Hansen explains (cited in Ribiere 2009) it relies on the belief that some knowledge probably could not be codified. Therefore it focuses on dialogue between individuals. It is a one-on-one approach. This strategy has been also named by other authors as the community network model, the connecting dimension, the process-centred approach, the independent model, the collaborative approach and the socio-organizational knowledge management.

### 3.4 Theory of Organizational Knowledge Creation

The rapidly changing environment of this century and the increasingly competitive markets requires companies to constantly create new responses. Original products are the materialization of the organization’s knowledge (Leonard 1996). The firms that manage to
succeed in this venture are able to shape their industry and pursue an *industry leadership perspective* based mainly on intangible resources as creativity and innovation (De Witt & Meyer 2004).

Thus, these companies devote their efforts to create enough value to beat competitors rather than meeting customer demands. This perspective is known in the management literature as inside-out approach and it calls for creation of opportunities by developing a new environment rather than perceiving it. Environment\(^2\) then, in the sense this perspective refers to, depends on the strategist’s observation and therefore it is neither objective nor real. On the contrary, as it is the result of a perception, then, an “environment” is created.

Innovation implies a great abstraction process which aims to turn knowledge into marketable goods, making it certainly a cognitive process. To implement this, companies must achieve organizational sensemaking to reach collective understanding concerning the firm’s goal, risk taking, and the method concerted to accomplish it.

Systems of sensemaking are necessary since creating projects entails an incursion into new insights as raw material, which may create confusion among the members, if those new inputs are not framed and then collectively interpreted (Dougherty et al. 2000). Although this is a collective process within an organization, some authors argue that creativity is carried out at the individual level of the organization. This is based on the assumption that the ideas flourish in people’s minds rather than in organizations (Heidmann 2008).

Given what was said above, the cornerstone for this study arises from the fact that only a portion of the knowledge is susceptible of being verbalized by words and numbers. This is due to the fact that it is dynamic, intangible and difficult to measure and it is essential to ensure the survival of an organization. Therefore, this study was found useful to illustrate the theory of knowledge creation. It was proposed by Nonaka and Hirotaka (1995) to distinguish two types of knowledge, tacit and explicit. Its fundamental premise suggests that knowledge creation occurs when tacit knowledge is mobilized successfully.

\(^2\) Some authors propose a distinction between *the environment* and "environment" to illustrate the different perceptions regarding, in one hand, the strong belief that it does exist and on the other hand, a vaguer concept to claim the enactment of an environment. (Weick 2001)
3.4.1 Explicit Knowledge

One of the more common notions about knowledge relates it to the exclusive sum of data and information; in other words, a *thing*. Although this study is based upon the idea of knowledge as a richer concept such as *thing* and a *process*; it is true that the progressive accumulation of ideas over time has fostered the way toward better understanding. This would not have been possible if knowledge is not capable of being in some measure codified. In fact, the invention of writing is an attempt to prolong man's existence in time and space. It led to the emergence of civilizations and hence, to a higher level of social complexity and organizations (Robinson 2003). This also makes knowledge a social practice as a result of the human interaction (Kalling & Styhre 2003).

Some authors regard the explicit knowledge as the one expressed by writing. It is highly impersonal and it is related mainly to technical specifications (Lahti et al. 2000). Since it is more precise and formally articulated it takes shape through physical objects products, patents, reports, manuals, databases, electronic media, blueprints and other similar papers (Choo 2000; Haldin-Herrgard 2000; Smith 2001; Wong & Radcliffe 2000). This tangibility makes explicit knowledge easier to share specially since the Informatics Technology revolution. (Lahti et al. 2000).

According to DeLong (2004), the most popular explicit knowledge sharing practices are documentation, interviews/debriefing and training. Management of this knowledge is focused on the content usually via codification practices to be able to break down knowledge into elementary forms (Kalling & Styhre 2003). An important precondition for fostering the knowledge gaining process is the awareness of the accessibility of this information.
3.4.2 Tacit Knowledge

Organization activities depend on technical knowledge as well as on work processes blended subtly throughout functions. As consequence, some vital knowledge for the future of a company is more elaborated, intangible, and context-dependent. It is highly valued during strategic planning performance.

Implicit knowledge, unlike explicit one, is subjective and related to individuals, therefore, more difficult to share. It possesses growth potential as it is already available in the minds of the individuals. It can be described as experimental, intuitive and communicates highly through face-to-face interactive collaboration (Clarke et al. 2001; Smith 2001; Zack 1999). Wong (2000) defines it in a more managerial way highlighting attributes as estimation and envisioning capability, physical maneuvering, efficiency enhancing, image formation and recognition, and handling of human relationships. Some other authors even include rumours, gossip, needs, and gut-feeling into the definition (Epstein 2000; Halding et al. 2000).

The notion of tacit knowledge was first developed by Michael Polanyi in 1958. He regards it as the knowledge from experiences in life. Since it is related to feelings and personal convictions it became extremely personal. In fact, Polanyi also calls it as personal knowledge (Polanyi 1958). He based his reasoning on the fact that as human beings, we possess enough cognitive development to acknowledge different symbolic systems. These enable us to recognize messages through alternative channels to spoken language. Thus, the different dimensions, as the non-linguists ones, have to take part into the study of knowledge.

As Kalling and Styhre (2003) explains, what is interesting about this notion of tacit knowledge is that even we do use tacit knowledge, the complexity lies on the fact that such knowledge is not easy to formulate in an everyday expression. This is however transferred without intention and it is not channelized through reports system due to its inherent difficulty to be systematized. It is an unconscious process (Sveiby 1996).

Furthermore, with the purpose of reflecting the real condition of knowledge, the concept of knowledge continuum has been introduced by Lahti et al. (2000) to illustrate the existence of a continuum where some forms of explicit knowledge may posses certain degree of tacitness,
despite the fact it is never just tacit or explicit but always somewhere between the two extremes.

Figure 4 - Knowledge continuum  
Source: Lahti et al, 2000

Although Polanyi states that tacit knowledge is personal, almost unique and therefore not easily transferable, he suggested that implicit knowledge is regularly shared through direct mechanisms of psycho-socialization as imitation, identification and learning-by-doing in order to reach multidimensional channels for the transmission (Sveiby 1996).

What is both interesting and complex is that due to the abstraction of this knowledge, the means by which the flow runs throughout the organization may differ significantly. Personnel rotation and cooperation recurrently lead to social dynamics where meaningful experiences are expressed. Employee interactions such as informal social networks and interdepartmental task forces are also valid modes (Marquardt 1996).

Lahti et al. (2000) explains that tacit knowledge does not necessarily seem to be transferred intentionally. It could be transferred by the intranet and also laterally through unofficial channels such as coffee and smoking breaks (DeLong 2004). The experiences shared during these spaces are useful in enriching work activities as the employees do not feel under the pressure of being questioned, evaluated or acting under a hierarchical directive.
According to most authors (Nonaka & Hirotaka 1995; Spender et al. 1996; Sweeney 1996; Teece 2000) face-to-face interaction is the most effective way to transfer knowledge. Unlike codification practices, communication practices seek to link a particular knowledge to some external resources in order to make it appear more comprehensible to a stranger. Colorful language as analogies, metaphors or models are useful when conveying emotional experience of performing (Kalling & Styhre 2003). Poetic language frames forms of expression more descriptive for those experiences highly correlated with tacit knowledge. The metaphors hence expand our imagination when literal verbalization reaches its maximum scope (Sveiby 1996). Indeed, Nonaka and Hirotaka (1995) affirms that by using them, tacit knowledge becomes explicit and defines it as *externalization*. He states that gaps between images and expressions are fed by the reflection between individuals upon the literary figures as metaphors and analogies.

Modern management has developed suitable practices to succeed in the effective transmission of implicit knowledge. Most commonly used are storytelling, mentoring/coaching, after-action reviews and communities of practices. As each practice has its own particular strengths and weaknesses then it is advisable to combine them.

Storytelling is a useful practice when sharing knowledge. Through narratives people is able to interpret and create meaning to turn disorganized experience into something more tangible and accessible to understand (Weick 1995). Stories are powerful to transmit subtly messages as values shaping behaviors that cannot be easily formulated in propositions or rules. In business, although analysis is preferred over narratives, stories reveal the employees’ perceptions regarding their leaders, coworkers and customers. They are even a tool or an indicator for diagnosing the organizational culture of any company (DeLong 2004). However, it is important to bear in mind that this practice is more effective when the purpose of the story is clear, proper occasions for telling stories are created, and the context to interpret the lesson has been provided.

Another constructive activity for direct knowledge transfer is mentoring and coaching. Some authors affirm this is one of the most successful practices when transferring one-to-one implicit knowledge. Due to the personalized relation, monitoring what it is has been learned is made by the expert or mentor.
Technical skills, organizational values or managerial skills are conveyed via coaching. It is been suggested to use this kind of mentoring focusing exclusively on critical issues since companies cannot afford wasting the time of their best employees. To overcome this obstacle, firms have commenced to include this kind of tasks into the job description of their staff (DeLong 2004). In addition, in order to assure the effectiveness of this practice, mentors must be trained on how they can assist their protégés as well as providing an infrastructure to support mentoring.

After-action review is the third suggested practice by DeLong (2004) to support short-term learning. It focuses on the lack of reflection after concluding a project so as capturing the learned lesson and integrating it back into the daily routine. It is developed, according to DeLong (2004), by means of four key questions: What was supposed to happen, What actually happened, Why were there difference and What can we learn from this and do differently next time. By doing this, Delong affirms that team learning in fostered and furthermore, it became an occasion to generate new knowledge as a collective construction which is more likely to be remembered over the years.

Communities of Practices can be also an effective method to bring together employees who share something in common. Leveraging natural associations or personal networking within the organization to develop communities of practice will contribute to connect professional who remain isolated. It will provide him/her ownership feeling to discover someone else shares the same challenges.

As usually these members hold same perspective and common frames of reference they share their expertise generously and ensure the community as a retainer of knowledge, even if a member left it. Successful communities according to Saint-Onge and Wallace (2003) are characterized by encouraging open and productive conversations, supporting mutual collaboration among colleagues, developing high level of commitment toward the community’s goal, keeping connectivity, and fostering the develop of new capabilities.

Despite the fact that the practices described above are useful tools when conveying knowledge; some studies have proved that the risk and uncertainty in tacit knowledge transfer
Diana Carolina Puerto  
Catrin Stighammar

is high. Lahti et al. (2000) illustrates in his empirical study with consultancy firms that these transmit tacit knowledge via stories combined with database but with a lesser degree of effectiveness. This is due to several hindrances of various kinds as even lack of awareness that implicit knowledge is actually possessed.

One of those hinders is, according to Lahti et al. (2000), what he called as “protectionism”. It is the lack of readiness and motivation among coworkers to learn and share what has been learnt over the years. While this motivational barrier can be overcome, there may be other constraints concerning the interlocutors’ capacity. It is likely that transferor and recipient do not have the suitable competences to offer and apprehend the information as well as some common frames of references (Lahti et al. 2000). May also be that the transfer appears not to have been successful due to the receiver has difficulty of applying context-specific tacit knowledge in other scenarios (Holste & Fields 2010).

Likewise, the transferor is not able to express tacit knowledge that is attached to mental or physical activities (Holste & Fields 2010). This ability to verbalize is what Chomsky (1968) called as *speech performance*. It refers to the capacity to express adequate formulations on life experiences. As a result, in the sense Kalling and Styhre (2003 p.66) refers to, “tacit knowledge is a function of individual knowledge”.

### 3.5 The role of Trust

A considerable number of studies laid also emphasis on the impact of willingness when learning and sharing knowledge. The willingness and ability to convey and use what has been learned are the key factors when transferring tacit knowledge formally or informally (Foos et al. 2006; O’Dell et al. 1998; Szulanski 1995; Holste & Fields 2010).

This notion though, including trust, can be regarded as one of the key aspects when transferring knowledge both between and within organizations. Trust is the general level of confidence that a person has in another’s competence based on the belief the others posses.

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3 In fact, Chomsky’s work has been in some extent correlated to implicit knowledge. For instance, his contributions to modern linguistics emphasize the existence of additional structures in the language called deep structures. Those are not visible in the surface structure and are necessary to complete the meaning of the message. Likewise, he proposes the pre-existence of an unconscious grammar that enable the kids to learn the native language. This unconscious knowledge influences the speech performance.
benevolent intentions to act ethically and predictably. They hence can rely on information received from others although it carries on some uncertainty involving risk (Rotter 1971; Mckinght & Chervany 2000).

Developing trust among fellow members who are located geographically distanced (virtual teams) or among those working in a rigid organization structure highly divided can be arduous (Vizcaíno et al. 2009). As encouraging knowledge sharing can be fostered by the increase of the feeling of trust among the members some authors have studied how co-workers decide what or who to trust.

Vizcaíno et al. (2009), for instance, has developed recently a new Trust model indentifying trust factors as a knowledge management strategy based on the notion of people as knowledge sources. Their particular contribution is that it takes into consideration unconscious paradigms that also interfere when deciding how trustworthy a coworker is. These trust factors, in the sense Vizcaíno et al. refers to, are four: Previous Experience, Level of Expertise, Position and Intuition.

The first one, Previous Experience, is acknowledged in several models concerning trust thanks to its significance. It is regarded as the most decisive factor when developing trust since people rely on those from whom they have previously obtained information considered valuable. Level of expertise, understood as knowledge about a specific matter, is another important influence in this decision due to, according to Vizcaíno et al., people confer higher credibility to information offered by expert than a novice. Still it depends on the Previous Experience factor. It is also changeable over time as a person might acquire more knowledge over the years.

The third factor is related to the Position the person holds within the organization. It becomes a significant aspect because people often consider more reliable the information provided from someone higher in hierarchy. However, the position issue can be ignored if the interlocutors hold a homologue position. Furthermore, this may have no value if the Previous Experience and the Level of expertise are higher.
Lastly, the unconscious factor: *Intuition*. It becomes relevant when the previous experience and the other factor are absent. Since people emulate human behaviour they often rely more on people alike themselves. Therefore, the decision to trust someone at this point relies on how similar the knowledge source is to oneself. This is based on the combination of two features: the difference in experience and difference in the position held within the organization. Thus, the higher the similarity between the interlocutors the higher the level of trust can be between them. Thus, the importance of each factor may vary and it is highly context-dependent. In Fig. 5 the relationship between the trust factors is illustrated according to importance for creating trust.

![Figure 5 - Trust Factors](image)

*Source: Our own*

In light of this, Nahapiet and Ghoshal (1998) has developed a proposal –repeated by other authors- which basically seek to explain the relation between trust and knowledge transfer. This proposition suggests that the trust required for effective knowledge sharing is based on cognitive and affective considerations. In one hand, care, altruism, mutual respect and concern will develop valuable relationships giving rise to what Holste and Fields (2010) refer to as *affect-based trust*.

On the other hand, the *cognition-based trust* is generated by the reputation, responsibility, competence, and reliability of the parties involved in the transfer. According to Ribiere, (2009) it is task-oriented. Both types of trust are interpersonal and they play a crucial role when the exchanging knowledge (Lucas 2005). Indeed, Nonaka and Hirotaka (1995)
illustrates this kind of personal relationships as part of the proper environment in which Japanese companies seem to have managed to be effective exchanging tacit knowledge.

Holste and Fields (2010) have studied the weight of these two kinds of trusts when sharing and using implicit knowledge. In this regard, they have found that the success to be willing to share tacit knowledge is found mainly in the affect-based trust even cognition-based trust is also needed. This study suggests that, regardless the competence of the recipient of knowledge, the transference will be effective as long as previous empathy has been developed between the agents. Otherwise, the transfer of implicit knowledge will be considerably poor (Holste & Fields 2010). Nowadays professionals are more independent and their knowledge has turned into a valuable asset as they have become as committed with their careers as their organizations (O’Neill & Adya 2007). Thus, they will share their knowledge primarily with people they have good relationships and second, they respect in the professional field.

On the other hand, the cognition-based trust becomes the primary element, but not the only one, when deciding to use tacit knowledge. According to Holste and Fields (2010) using knowledge, rather than sharing it, represents a higher risk since unexpected outputs from an unreliable source might endanger professional credibility. As the professional interested in the knowledge must be confident enough about the reliability of the source, this judgment concerning the competence of the knowledge source are commonly built by consensus. On contrary, the decision concerning empathy between the agents is made independently.

Although the main vehicle to achieve willingness to exchange and use tacit knowledge appears to be the trust, is also significant to make sense on individual willingness to improve the way things are done and reduce failure probabilities. Benefits and advantage of transfer knowledge must be perceived by the employees (Lucas 2005). Sensemaking process plays such a significant role in this matter.

3.6 Sensemaking Process

The sensemaking perspective relies on an interpretative approach from Cognitive psychology. It is focused on the individual and social process by which people mentally process information. Weick (1995) state that the main reason we conduct sensemaking is to establish
and maintain our identity through continuously reevaluating ourselves in the light of our environment. In view of that, the sensemaking perspective deals with the learning process concerning the ability to interpret and create meaning from ambiguous or unrecognizable information. Thus, sensemaking process goes beyond the simple interpretation as we choose the worthy events as surprises and contradictions to explain and therefore, redefine reality (Louis 1980).

The sensemaking process arises from the human necessity to provide order and coherent structures to turn disorganized events that rules the human existence into something more tangible and accessible to understand (Weick 1995). Therefore, the cognitive psychology behind the sensemaking perspective seems to be adequate to analyze the process by which tacit knowledge becomes explicit.

Given what was said above, what is valued in a leadership position in the light of the mentioned perspective is the ability to facilitate the reflection by which intangible concepts become intelligible in order to provide a special meaning to people’s activities. This is possible by recreating them from a different angle to offer novel interpretations. By doing so, novel applications and even innovations will arise.

This turning point, defined by Foldy et al. (2008) as a cognitive shift and radical learning by Heidmann (2008) describes the mental change in the way the individuals and the groups conceive themselves and their collective work. Under this premise, the innovation process takes place in an organization by individual processing information. The strategic sensemaking process following three stages: Observation, interpretation and action. On this regard, Vandenbosch (cited in Heidman 2008) distinguishes two types of learning models: mental model maintenance and mental model building.

The first one explains how the new information fits into the preconceived mental structure or frames of reference and therefore reconfirms it. It is important to mention that the more developed the frames are, the more structures are available to categorize. Mental model maintenance concerns daily routines and for that reason it is the most utilized. Yet, the desire to understand new data (cues) so far indecipherable makes us to frame it within the known categories which, as a matter of fact, constrain the infinite possibilities of our thinking. This
leads to a paradox in which greater knowledge facilitates learning but simultaneously limits critical and questioning thinking.

The second learning model, mental model building, deals with the alterations that are made within the mental structure with the purpose of accommodating new insights. This implies the invention of new perspectives whereby it requires a considerable additional effort. Thus, this type of learning becomes the most suitable model to pursue strategic thinking; nevertheless, it is the most difficult to maintain. For instance, the mature industries that once found the formula for success find it difficult to develop brand new concepts.

In this situation, the best choice for an organization is to promote environments that stimulate original thinking by exposing itself to diversity as well as encouraging learning-by-doing. Regarding this issue, Pondy (1978) argues that organizations engaged in sensemaking differ in possessing a variety of images, vocabulary, and symbols that enhance their ability to adapt over organizations with limited language. At this juncture, multi-disciplinarians perspectives are needed to reframe the known categories.

Fostering futures developments is possible by extrapolating trends from different context to stimulate the invention of alternative capabilities or applications. This process is known as cross-industry innovation and it seeks to adapt technological advances from one sector to another. Thus, a company may gains several advantages as obtaining differentiation as well a new perspective on its essential agents for success while reducing research project risk (Dürmüller & Levin).

3.7 Summary

Our theoretical framework moved gradually from a general view from the notion of knowledge throughout the History, to a more specific contextualization of its meaning and implications for the post-capitalist society. Given that the only remaining exploitable resources currently are intangible, new subtle considerations when studying management became our objects of study.

For that reason, our frame of reference proves an exploration through notions such as knowledge, tacit knowledge, knowledge transfer, knowledge management, trust and the
process of sensemaking. These are the most relevant concepts that conforms the vision of this study. They are presented in the following figure:

![Theoretical concept model](image)

**Figure 6 - Theoretical concept model**

Source: Our own

These theoretical concepts have been useful tools when facilitating the interpretation of the consultant firms’ reality and these have provided us the academic support to develop deep questions regarding the knowledge transfer phenomenon.

The reflection on theoretical concepts regarding consulting firms and the sharing of Tacit Knowledge is presented in the following Table.

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Questions emerging from theoretical framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Since consulting firms are knowledge-based firms, have they developed their own concept of knowledge?</td>
</tr>
<tr>
<td></td>
<td>Do consulting firms have a Knowledge Management department in order to handle the pre-existing K and generate new K as a sustainable advantage?</td>
</tr>
<tr>
<td></td>
<td>How can consulting firms prove that they are fast learning organizations?</td>
</tr>
<tr>
<td></td>
<td>How can they learn from past experiences?</td>
</tr>
<tr>
<td></td>
<td>How can they prove that lessons from the past are impacting positively on future decisions?</td>
</tr>
<tr>
<td>Knowledge management</td>
<td>Do CF apply Knowledge management tools as codification strategies? (people-to-document approach)</td>
</tr>
<tr>
<td></td>
<td>Do CF apply Knowledge management tools as personalization strategies? (one-to-one or network approach)</td>
</tr>
<tr>
<td></td>
<td>Have CF formalized the use of knowledge sharing practices?</td>
</tr>
<tr>
<td></td>
<td>Since each practice has its own strengths and weaknesses do they combine them?</td>
</tr>
<tr>
<td></td>
<td>Do CF have established Mentoring programs to train junior consultants?</td>
</tr>
<tr>
<td></td>
<td>How do they handle such an expensive practice for a company?</td>
</tr>
<tr>
<td></td>
<td>Do CF charge overtime to the consultants to do mentoring?</td>
</tr>
<tr>
<td></td>
<td>Do CF include this practice into the consultant’s job description?</td>
</tr>
<tr>
<td></td>
<td>Do CF previously train the senior consultant with methods to coach effectively?</td>
</tr>
<tr>
<td>Tacit Knowledge</td>
<td>Do CF formalize evaluation to reflect on lessons learned from every project?</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Is this new knowledge posted or published on a public space to enhance its disclosure?</td>
</tr>
<tr>
<td></td>
<td>Since developing trust among fellow members who are located geographically distanced (permanent trips or rigid organizational structures) is arduous, is the CF encouraging tools to bring them closer?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tacit Knowledge</th>
<th>Are CF aware of that personal rotation, informal social networks, coffee breaks and interdepartmental task forces lead to social dynamics to transfer meaningful experiences since employees do not feel questioned or evaluated?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Do they apply any of the tacit sharing knowledge practices? Storytelling, Mentoring &amp; coaching, Communities of practice and After-action review.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trust</th>
<th>How do senior consultants react to the idea of sharing knowledge they have acquired over the years?</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Do they show reticent? (&quot;protectionism&quot;)</td>
</tr>
<tr>
<td></td>
<td>Is it taken into consideration that the receiver’s capacity could block the sharing since he/she might not have the suitable competences to understand and even more important to re-use and apply the knowledge? (cognition-based trust)</td>
</tr>
<tr>
<td></td>
<td>Since sharing of Tacit knowledge is more effective as long as previous empathy has been developed between the agents, are the CF encouraging activities which develop care, altruism, mutual respect and concern among the consultants? (affect-based trust)</td>
</tr>
<tr>
<td></td>
<td>Since the willingness to re-use tacit knowledge acquired from another consultant depends on the competence and reliability of the consultant sending, how is the CF motivating its best consultants to share knowledge?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sense making</th>
<th>How does a CF achieve organizational sensemaking to reach collective understanding of the firms’ goal and build an organizational culture based on knowledge?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How are the CF making sense of the individual willingness to improve the way things are done to reduce failure probabilities?</td>
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</tbody>
</table>

Based on these reflections, we composed the questions that we used for interviews with the members of the consultant firm PricewaterhouseCoopers. The questions can be found in Appendix 1 p.79.
4. DISCUSSION AND INTERPRETATION

This chapter aims on one hand, to present the empirical findings of this study, arising from the interviews conducted at the Headquarters of PricewaterhouseCoopers in Sweden; and, on the other hand, it also has the purpose of presenting the analysis of our research.

The prior literature has provided illuminating insights that have enabled us to expand our understanding concerning the sharing of knowledge. However, direct contact with an empirical case provided us with additional understanding of the subtle contextual factors that may aid or hinder the process in the reality. To extract these aids or hinders from the empirical findings we have based the analysis on the theoretical concepts as a point of reference together with our own interpretations.

4.1 Knowledge Management

In the current situation PwC does not have a policy for sharing knowledge within the company. The Knowledge management department covering the entire company was established just recently. Prior to that employees situated at different departments were responsible for knowledge sharing within their own level of business. One employee at PwC explained that the knowledge manager at his department is mostly focused on material issues and hence neglect the importance of sharing experiential knowledge. Other consultants at the firm who have a leader position express their role as networkers and not knowledge managers. They spend time connecting people but does not guide the process further to ensure knowledge sharing.

Hansen (cited in Ribiere 2009) promote the personalization strategy when sharing implicit knowledge which encourage people to build networks, which PwC apparently manages well, but also to create dialogues between people within the network. The wish to have more discussions with colleagues in order to reach better understanding and more knowledge was expressed by the consultants at PwC. To see to that employees get room and time to discuss in order to increase the efficiency of sharing implicit knowledge we consider to be a task for the overall knowledge management department.
One issue which we regard is another consequence of the focus on building networks at PwC is the way these networks are being used. The interviewees said that when they have a question they mostly go to a colleague within their network for an answer, despite the type of knowledge they were seeking. Many of them referred to the culture at PwC as the underlying reason and others said that it is a natural part of their work to ask questions and be given questions.

All consultants related their own degree of knowledge sharing with the limited time they had to engage in these activities. The overall dependency of personal networks and the limitation of time we believe may have the result that consultants waste their time sharing explicit knowledge instead of focus more on sharing experiences.

Face-to-face interactions has been mentioned as the most effective way of sharing experience (Nonaka & Hirotaka 1995; Spender & Grant 1996; Sweeney 1996; Teece 2000) and therefore we believe that this type of sharing should be prioritized in the occasions of personal encounter to benefit the overall sharing of implicit knowledge within PwC.

What the Knowledge management department could take for counter measures is to improve the means with which PwC share explicit knowledge. One way is to improve the technology based information systems. There seem to be a need for this at PwC as several consultants expressed their frustration regarding PwC’s current databases during the interviews.

4.1.1 Organizational Complexity

One factor affecting the process of sharing implicit knowledge is according to Polanyi (1958) the feelings of people. At PwC we could sense a strong mental dividing of people within the building where the consultants work. As one employee expressed about another department in the same building:

“They are number one here at PwC because the service they provide is preferred by the top management. Therefore they act superior and feel superior. The rest of us is only support staff.”
Other consultants also highlighted the difference between their department and others and some blamed the physical distance between them due to working on different levels while others mentioned the complexity of the other department’s services as the reason for limited or no interaction.

The internal social boundaries at PwC is even narrower than the working ones. When the consultants were asked who they shared experiences with or preferred to associate with most of them answered the colleagues within their work teams and not within their departments. Davenport and Prusak (1998) state the importance of everyone’s involvement in the knowledge sharing process. Hence, PwC’s new knowledge manager will have one of the biggest challenges in uniting the staff at PwC.

Several authors (Marquardt 1996; DeLong 2004; Nonaka & Hirotaka, 1995; Spender & Grant 1996; Sweeney 1996; Teece 2000) emphasise that for tacit knowledge sharing to be efficient employees need to be able to interact with one another. PwC has implemented a number of measures for the employees to meet and bond. We believe that a significant part of the knowledge management at PwC has been focusing on creating an arena for sharing knowledge instead of ensuring that these events actually lead to knowledge sharing.

4.1.2 Formal Practices for Sharing Experiences

To see the existing impact of implicit knowledge management within PwC we investigated what formal methods that were used by the consultants and what practical factors that influenced the methods’ efficiency. DeLong (2004) suggested four practices for sharing tacit knowledge which became the focus of this part of the analysis.

**Mentoring**

This method was named both mentoring and coaching within PwC depending on department but from what we could tell the names did not imply any difference in practical execution. For the consultants and advisors asked, this practice, which we will refer to as mentoring, mean to be responsible for one or several employees within a department or work team. How the actual mentoring was performed at PwC depended on the work situations the mentor and mentored person was faced with as well as the involved persons’ personalities.
The importance of this practice was highlighted by some of the consultants as they believed it to enhance the learning process of everyone involved. Furthermore, they said that it was rewarding in terms of knowledge sharing as it able a flow of knowledge between the concerned persons. This goes in line with what theory state about mentoring as one of the most effective ways to share implicit knowledge.

Despite the said effectiveness of the practice a contradicting perception was found among some of the mentoring consultants. One advisor explained her position as a mentor in the following way:

“It is more difficult than I thought, it is hard to understand each other sometimes. “

Another mentor explained the difficulties he had encountered with the practice:

“Consultants can be individual and self confident which makes it harder to help them. They often have the mentality of one man, should have more team spirit.”

The positive effect of the formal aspect of the practice can be questioned since many of the consultants we interviewed expressed that informal mentorship could overcome the barriers mentioned above. If a consultant or advisor were able to choose the person to mentor the approval of that person would most likely facilitate the knowledge sharing. As it is today the consultants are assigned a person to mentor, at least in the mentor relationship between a senior and novel consultant. This brings the risk of disturbing the sharing of implicit knowledge in the mentoring process as no necessary empathy have been develop.

Furthermore the knowledge management seems to lack in the instructions of how mentorship should be conducted at PwC. A few employees said that they had mentor/coaching education with the purpose to learn the PwC way prior to becoming a mentor. Most of the interviewees on the other hand had not received any education at all for this practice. They expressed that the company did not seem to have a plan for how to execute mentoring which we believe clearly complicated their provided situation as mentors because they had to base the mentorship on their personal perception of both PwC and how the company do business.
In the shortage of instructions the consultants turned the role of mentoring into what they wanted it to be. We thought this could have the consequence of a scattered view of PwC and how a consultant should work. Our fear diminished with the answers we received from the consultants at PwC since most of them gave a similar explanation regarding mentoring as this consultant’s answer:

“I discuss behavior, career direction and I give feedback”.

Mentoring is a well used practice at PwC and none of our interviewees were unfamiliar with the method. Despite this the effectiveness of the method seem to vary from one mentorship to another and PwC does not have any policies to prevent this. We believe that a more formal structure provided from management on how to conduct mentoring together with an increased understanding of the necessity for good personal chemistry between the mentor and the mentored will result in better sharing of tacit knowledge during the execution of this practice.

*After-action review*

When it comes to after-action review, this method seems to be seldom used at PwC. We would here like to mention that a policy that would ensure the creation and circulation of reports for after-action review is non existent at PwC as for now.

The employees interviewed did express the importance of sharing knowledge gained during a project but almost none of them took the time to write down a report for the internal distribution of the knowledge acquired during such field work.

It was also uncommon to take the initiative of providing others with the experience during face-to-face interaction, instead the question-based culture at PwC made the consultants share merely if they were asked to do so.

According to us, the lack of policy and consultants own initiative hinders the sharing of experience within PwC, especially between senior and junior, as a novel consultant does not know what to ask in order to receive the implicit knowledge most useful for them. Moreover, if management does not stress the importance of writing reports and sharing them with others, consultants, who seem to constantly struggle to find time enough to perform their work effectively, will not prioritize this before the stated duties within their job description.
**Storytelling**

Several of the consultants within our study wanted to have access to more stories regarding successful projects or how a senior managed to get a contract or a client. Some of the consultants mentioned that the greatest success cases were occasionally posted on the intranet. According to us this is not the most efficient way to share this type of knowledge since the personal factor is lost and experience based knowledge are simplified to the extent that it is possible to turn it into explicit knowledge through codification.

One consultant explained why story telling occurs to such low extent at PwC:

“If I had the time I would explain my cases more but the interest to hear about old cases is low. If people share knowledge or not it is up to them, it is not formalized.”

One suggestion that was given during the interviews regarding storytelling and the above issue was that seniors should be provided with the opportunity to share their experiences with juniors under a more formal setting. This is supported by theory as the sharing of implicit knowledge is best done within a controlled context and with a known purpose.

**Communities of Practice or Informal Networks**

As mentioned previously the notion of networks are highly present within PwC. When these networks are established by management the method is called Communities of Practices. Within PwC the organizational structure creates networks as well as the affinity felt within the different professions present in the organization. As the networks are created without the incentive of management they can not be said to be Communities of Practices.

Despite the informal creation of these networks they seem to have a big impact on the knowledge sharing within PwC. People in a network were more willing to share knowledge with people in the same network than with people outside. One consultant working in the health sector explained his view of sharing knowledge outside his team:

“It is easiest to share knowledge within my team cause the further away from my team I work the less I focus upon sharing knowledge.”
All the interviewees mentioned other formal settings for sharing knowledge which PwC encourage such as meetings, through newsletters or during project work. What they had common was the limitation of these settings to their own department, team or profession. The practical reason for this we believe plays a major role as the different lines of service often have different clients or working methods and therefore differ in their need regarding knowledge.

4.1.3 Leaders Role in Knowledge Management

We wanted to explore how much influence leadership, both indirect and direct, have over the sharing of implicit knowledge within a consulting firm.

Within PwC we discovered a structure or hierarchy depending on experience as well as position which influenced the sharing of implicit knowledge. One consultant gave the following explanation of the normal process of working with an assignment:

“Juniors do some work and then I give feedback. When they are done I give the work to more senior staff and they then give me feedback. They propose changes but do not explain them. You do those changes but you still do not know why.”

We interpret this as a good base for sharing explicit knowledge as the more experienced seniors review the work of other consultants. Unfortunately the implicit knowledge seem to be neglected in the work process and the experience of the more junior consultants do not have the possibility to develop.

Another consultant explained the effect of this hierarchy within PwC on the basis of communication channels:

“We, ourselves do not have the authority to ask. Instead we ask our department’s boss to ask the other department’s boss. Would be better with more communication on a lower level.”
Without juniors interaction with colleagues in other departments their frame of reference is prevented from growing and consultants who are in need of implicit knowledge are not placed in a context where it can be shared.

The examples above enforce the complex of problems rendering from the networking structure at PwC.

**Indirect Leadership**

The trust model by Vizcaíno et al. (2009) relates the experience of a person with how trustworthy that person is perceived within a company. The higher the factor is the more willing people are to receive implicit knowledge from that person.

From the interviews we realized that a person with long experience within PwC is placed in a networking position and other consultants rely on that persons knowledge or recommendations of from whom to seek knowledge.

Although the interviewees seemed to be aware of this indirect leadership and accepted it, not many of the senior ones recalled this responsibility when we asked what they did to share knowledge. Their answer indicated that they focused on explicit knowledge and not implicit knowledge. The importance of interaction was neglected regarding the colleagues’ development but seemed to be influencing the leaders own way of seeking knowledge as face-to-face communication was unanimously preferred when trying to solve complex issues.

Drucker (1993) states that knowledge needs to be actively applied to render results. According to us it is therefore the responsibility of the more experienced consultants to see to that juniors are involved in the process of sharing implicit knowledge.

**Direct Leadership**

This aspect is important as with a higher position within the company bigger responsibility for the firm’s performance is expected. As we have mentioned the degree of knowledge sharing can affect the efficiency of employees and should therefore, according to us, be of interest for the management at PwC.
When the consultants were asked what people or organizational functions they believed could influence the degree of knowledge sharing within PwC they all agreed on the partners or the management team of the company.

Many of the consultants interviewed said that the main reason for them not to share knowledge to a higher degree was because of time and lack of incentive. Both of these factors can be related to the focus on revenue within PwC.

One consultant explained that when his team was assigned a project they were measured on the result created by solely his own department. To bring in the help of other consultants from other departments would divide the result between the departments leading to a smaller result for his department. With less revenue to present his department’s performance was perceived as lower although the knowledge sharing within PwC had the chance to increase and affect the company’s overall performance positively. PwC is currently working to increase the promotion of other service lines when dealing with a client but as the consultants explain they do not get rewarded for it. This is the view of another consultant:

“If I have a client and I could bring in other products into that relationship we would cooperate better. Now we don’t have any incentive to share knowledge or clients.”

The time aspect was also mentioned several times as a hinder and within PwC they have a system for allocating revenue among consultants. All client and consultant related work are connected to different time codes. If a consultant does something which is not connected to revenue for the firm this time can not be given any code and hence renders no revenue for the consultants department.

We asked if it was accepted for the consultants to spend a day in another department and they said yes if it was approved by management. We also asked if this was rewarded in any way and then they said no because to enhance your own frame of reference or experience without any direct client work was outside the system of time codes.

The willingness to share knowledge can not be affected if people do not have a reason. We received a general perception that the consultants we interviewed all enjoyed working for
PwC and they expressed a high loyalty to the company. Most of them said that they were willing to increase their knowledge sharing but as mentioned they asked for some initiative from the top to streamline the process and increase its importance.

4.2 Tacit as Distinctive Knowledge

The knowledge society has given rise to firms as PwC providing services based on knowledge. Its permanence or market leadership depends on the ability to create or reformulate new knowledge via analysis. On this regard, the Knowledge manager of PwC at the Headquarters office in Stockholm, Mattias Eklund stated that PwC understood knowledge by means of categorising it into three different complexity levels.

This is illustrated in Figure 7.

At the base of the pyramid is the common knowledge, which consists of information easily accessible. This explicit knowledge is used basically within every organization. The second level is Property knowledge. It is related to intellectual capital, patents, among others and it is characterized by a less degree of availability. The third level is the Distinctive knowledge which is located at the top of the pyramid and it is the one which our study concerns.

This distinctive knowledge, unique and learned from the experience, will give the firm a competitive advantage that is not easy to copy. For instance, according to our interviewed, PwC has been acknowledged by possessing superior knowledge in Business effectiveness. This type of knowledge can be resembled as tacit knowledge since it is the result from years of experience.
4.2.1 Types of knowledge

To reach the mentioned distinctive level, consultants argued that what is necessary for PwC to stay competitive is to hold a combination of customer knowledge (needs, status, structure, capacity, among others); industry and market knowledge to recognize trends and risk just on time, as well as holding talented practitioners.

Coinciding with Colman’s (2001) differentiation between declarative and procedural knowledge, all the advisors interviewed felt that in order to perform on a high level there is necessary for everyone to possess basically two types of knowledge. Technical knowledge can be described as a blend of theoretical expertise, consultancy tools and consultancy methodology.

The consultants acknowledged that practical knowledge from the experience accumulated over time was also indispensable to proceed in the consultancy industry. They stressed the importance of the tacit learning; it means how to interact and perform trustfully in key situations as in front of the client’s member board. Although both types of knowledge are important, most of the consultants agreed upon the experience as the decisive knowledge required to be recognized as an excellent advisor.

In fact, when the consultants were asked about how they learned their work when they began at PwC they argued that, even receiving induction training, the greatest learning occurred by means of daily interaction with experienced consultants. They admitted how the progress in their individual learning-curve is visible. As one of them revealed, his performance can be considered different comparing his first year and forth year in several aspects. He explained how he now can identify issues earlier and faster and how this enables him to shortening down the time doing things and increase his effectiveness. He also expressed that a very valuable knowledge gained is how to handle difficult situations and knowing the way that support and calm must be conveyed to the client. This correspond with the extensive literature revised where personal interaction is claimed as the most effective way to transfer the knowledge gained through the experience.
4.2.2 Data, Information and Knowledge

What is also worth mentioning is that the discussion concerning sources, activities, methods, and the situations where knowledge where most likely to be shared led us to infer that consultants interviewed lack of a homogeneous understanding of the knowledge concept. As some kind of knowledge can be stored in physical objects and other type of knowledge is accumulated in people minds as well as in the work employees do, we believe there is a mistaken parallelism when differentiating data, information and knowledge. We consider that this confusion may underestimate the potential of knowledge as well as it is indispensable for an organization and its members to recognize where its knowledge is “placed” to guarantee people are aware of its availability. For instance, one of the advisors interviewed argued that there is no lack of knowledge since everything can be accessed via information technology. We think that, even thought this database type of information is required, something else is needed.

Some consultants asked expressed that they think they do knowledge sharing almost in every collective activity they are involved in as monthly meetings, group team coffee or lunches. Concerning the methods to communicate, telephone calls and emails where the most used ones when reaching a person out of their unit, and face-to-face interaction comes when proximity exists. When discussing the most common reasons to seek a colleague, the asked advisors listed the necessity for advice usually as second opinion, finding specific information and socializing.

Likewise, this same situation regarding the unclear concept of knowledge occurred when discussing the importance of informal spaces for knowledge sharing. Despite that some interviewed declared that those are not the proper environment to convey meaningful experiences since people tend to talk about something else but work, other consultants believe that people feel more comfortable in those kinds of unofficial moments to address and answer questions.

We believe these descriptions correspond to unstructured and isolated data without meaningful value. What companies as PwC seeks and what this type of studies concern is the
product of the reflection and sensemaking on information to create new knowledge. This confirms our conviction that for knowledge to become a sustainable advantage it has to be the outcome of a process.

4.3 Trust

The interpersonal relationships among employees within PwC is a significant factor when studying Knowledge sharing. We observed that a crucial starting point in our analysis arises from the fact that the knowledge share is made among persons and it is a voluntary process.

The need for setting a focus on the human aspect of the knowledge sharing stressed our decision to study this particular field. Since the idea of trust dependant on two major factors such as empathy and competence is widely represented in the literature, we have examined both of them. Thus, elements of cognitive psychology have been used to develop a human approach of this phenomenon. Illustrating the notion of "willing to" have provided us with a broad understanding of the phenomenon making the role of trust one of the leading concepts in our analysis.

4.3.1 Social integration and Proximity

Peter Drucker’s (2003) concept of Knowledge society claims for social and economic results produced by practitioners from several disciplines collaborating together to apply and perform knowledge. This is only possible under the condition of having a high level of communication where relations affect directly the effectiveness of the transference and creation of novel knowledge.

On this regard, for PwC setting it seems that the proximity among consultants interviewed facilitates the strengthening of deeper links and therefore it fosters social dynamics. The consultants interviewed said unanimously that they primarily interact with co-workers belonging to the same team within their business units. It means that their daily interaction and hence the knowledge sharing include approximately the five closest peer-colleagues around including supervisors. As one of the advisor interviewed stated: “the closest, the easiest”.
We believe that these limited interpersonal relations reduced mainly to people whom they share office with represent low levels of interactivity among employees in a general perspective. It risks the expansion of social networks which play an ultimate role when fostering innovation within knowledge intense firms. It is also worth mentioning that social networks becomes even more relevant in this type of firms where the experiential knowledge is non codified so it is personal and almost private and therefore beyond the management of PwC. Thus, the decision to share or withhold information with fellows relies on the personal assessment of the performance of colleagues. This becomes a behavioural issue hard to control and undoubtedly a challenge for the management.

4.3.2 Cognitive-based trust

According to trust theory, stronger relationships enable consultants to get to know each other better making their competences, personal preferences and work style visible. Thus, we have observed that advisors daily acquire sufficient information about their peers which turns into the criteria to define who is reliable enough. On this matter, the group of interviewed consultants collectively agreed that they usually establish professional communications with colleagues they find more trustworthy.

In fact, coinciding with Viscaíno’s (2009) trust’s factors, PwC advisors concurred upon that they seek advices or second opinions in first place, from a person they have consulted before. The details they gave concerning this preference was that they have had the chance to verify, through previous encounters the sharpness of the consulted colleague’s judgment and the quality of his/her performance. We believe this is a priority issue since the wrong or outdated opinion may risk the professional reputation as a wise adviser. Nahapiet’s (1998) concept of cognitive-based trust provides a very illuminating insight to understand the role of reputation when deciding whom someone share information with in the consultancy industry.
4.3.3 Affected-based trust

Interviewed advisors also established that they prefer to seek co-workers with whom they have had previously some relationship to guarantees more willingness to collaborate. This is due to some common understanding and affection has been developed before. Whether the consulted person possesses or not the answer this probably will tend to provide extra guidance for finding the right expert. This turns affect-based trust into an undoubtedly driving of a development trust process.

Contrary to Lahti’s (2000) reasoning, the whole interviewed sample believes that the PwC environment enjoys an enormous willingness to cooperate and it has no protectionism among colleagues. One of the consultants explained that, from his perception, this is due to PwC’s encourages the consultants to demand seconds opinion before presenting proposals to the clients. Therefore, everyone will be in need of advice and it develops a reciprocity environment. It can also be explained by the routine that advisors in every level are evaluated in terms of collaboration. We find this constructive since the company has built the bases of a culture to support a highly sharing environment.

Since the closeness among co-workers has proven to be a crucial factor to share knowledge the company has developed a rich agenda with several types of activities in order to bring the people together as a mean to raise the understanding of each other. The interviewees illustrated that the firm provides them several options of educational events as well as integration activities. PwC has also made outdoor activities available as sports groups and team building exercises as well as indoor activities as “Friday fika” or the monthly breakfasts. The asked employees showed themselves satisfied with the available options of social activities and they claim that more than 70% of the employees attend those events even those which are not mandatory. This is probably one of the reasons why PwC has been included at the Fortune’s “100 Best Companies to Work For” list.

Although the company evidently is supplying welfare to its employees, it is not that clear how effective these type of activities are in terms of providing the necessary conditions for expanding every person’s network as well as sharing knowledge. Some of the more critic
consultants confessed that those activities are organized separately for each department, business unit or service line where people have already developed bounds between each other.

They therefore miss the chance to meet new people placed in different locations. Likewise, when the consultants were asked about the type of conversations that took place in these social activities, some of them illustrated these events as recreational occasions where people tried not to talk that much about work issues. In this sense, those social events are not impacting positively on the interaction among lines of services, the affect-based trust strengthening and the knowledge share between the employees.

4.4 Sensemaking

Individual sensemaking follow the process of observation, interpretation and action (Heidmann 2008). What guides this process is peoples’ strive for reassurance from their surroundings (Weick 1995). At PwC a big part of the individual sensemaking process occurs during feedback and by sharing second opinions regarding peoples work.

Weick (1995) mentions that identities are constructed out of the process of interaction. Hence the consultants and advisors at PwC build their work identity on the contact they have with their colleagues. Due to the grouping of people based upon trust and physical distance at PwC, employees will feel a connection with a certain type of people since they can identify themselves within that group.

We consider it to be a higher chance of receiving reassurance from people with the same understanding than seeking advice outside the group. This can be one of the cognitive reasons for the strong separation between internal networks at PwC.

Another reason could be the degree of understanding among different groups. Theory points out the hinder if either transferor or recipient are unable to make sense out of the knowledge process. At PwC the consultants are divided into different professions and levels of experience. Moreover, they are placed depending on their line of service within the company.
This way of structuring the employees in a certain way has created a lack of understanding between different groups of identity and complicated the sensemaking among departments. One consultant at PwC explained that he did not communicate with one of the other departments because it was too hard to grasp all their services and name abbreviations. Another experienced consultant said that he often forget that his colleagues might not have the same knowledge as he does and hence he neglects to share his.

The result is that the networks, which is supposed to aid knowledge sharing, instead hinder the sensemaking process by preventing the development of employees frame of reference.

As the strong notion of different identities emerged during our interviews we believe it is utterly important that knowledge management work is done to increase the understanding of what is the PwC way. This could create a more comprehensive work identity among the entire work force which would give the employees a chance to increase their understanding of each other and facilitate the sensemaking process for a better collaboration.

4.4.1 Create a Tangible Concept of a Corporate Identity

To change the subjective perception of what PwC does into a more tangible concept is also a way of improving the sensemaking process. Several of the consultants wanted to learn how to do it the PwC way because they believed it would enhance their understanding of their work. The consequences of this problem became even more evident when one after the other interviewed employee said that what they were lacking was an overall picture of PwC. They questioned what the company is actually doing and what will happen in the future. This state of uncertainty we believe is demotivating for the consultants and it gave us a somewhat confused impression although every interviewed person worked for the same company.

Since experience based knowledge is highly personal and intangible (Clerke & Rollo 2001; Smith 2001; Zack 1999) a common perception of what it means to be a consultant can facilitate the sharing of implicit knowledge and furthermore have a positive impact on the overall knowledge sharing within PwC.
4.4.2 Developing a Senior Frame of Reference as a Junior

Another factor affecting sensemaking within PwC is that the meanings people give things depends partly on their own frame of reference. When we asked what knowledge the interviewees believed was most important for their work they all depicted two areas. The first one was technical knowledge which is explicit and easy to access. Hence it gives everyone at PwC the same prerequisites for acquiring this knowledge. The other is the practical knowledge and this knowledge plays a major role for the sensemaking among consultants at PwC. To exemplify how important this knowledge is for a consultant one interviewed said the following regarding novel consultants, also called associates:

“It is hard to sell associates because the client question what they can do”.

For a junior consultant it is therefore crucial to make sense out of the practical knowledge regarding how to conduct consultant work. Another employee expressed what we perceived as frustration over the undoubted way for a PwC consultant to develop from a junior to a senior:

“I want to know how to focus on becoming a good consultant, advisor. At PwC you are supposed to learn by doing, with time you should become a great advisor. How does that happen? When will I know I have become a great advisor?”

Sensemaking is a reactive process as a person can not make sense of something which he or she has not yet experienced (Weick 1995). If novel consultants’ interaction with seniors enhance their meaning and understanding of client related work and general field work even before they have held a client meeting this could speed up the development and increase the overall performance at PwC. Some of the more senior consultants we interviewed expressed an unwillingness to bring juniors to meet clients, and our perception is that it rarely occurs within PwC due to the risk of giving an unprofessional impression and the lack of time.

Keeping in mind what Lahti et al. (2000) said regarding tacit knowledge as a partly unintentionally shared type of knowledge, the interaction and sense making process does not
have to be an active process from the seniors perspective. Mere observation of a senior practising field work is enough for a junior to improve his/her sensemaking process. In reality this would mean that a junior do not have to be noticed at a client meeting but be there in the background. The most rewarding practise would be to implement juniors’ presence at client meetings and make clients accept that this is done to ensure the competence of novel consultants possibly helping them in the future.

4.4.3 Creativity and Innovation

Dürmüller and Levin mention cross-industry knowledge as a way to foster innovation. Many of the interviewed consultants wished to work with other lines of service to improve the solution to the client hence the will for this kind of cooperation is present within PwC. The scattered work environment and the revenue system of time codes are formal hinders for this type of work. Some consultants also explained the risk of involving someone they had not previously worked with into a project and how difficult it could be to see the clients issue from another department’s perspective. Both these personal barriers we believe can be decreased with a more efficient sensemaking process.

Through interaction the consultants’ frame of reference can develop and they will gain a better understanding for another departments work. If management gives a strong meaning to cross-industry cooperation through sense-giving consultants might also become more willing to take the risk for the benefit of the result.

Another way to enhance innovation is to create an environment stimulating creativity. By having juniors and seniors interact their different experience can develop the mental model building (Vandenbosch, cited in Heidman 2008) and new solutions can be created. Coinciding with Vandenbosch, the challenge is to realise that not only the experience of the senior consultants is valuable for PwC, also the junior ones can bring new fresh insights which could increase the distinctive knowledge level within the company.
5. CONCLUSIONS

This chapter will present our final findings and the conclusions we have drawn from this study. Furthermore, it contains our contribution to Academia as well as our suggestions to the firm involved in this research. In addition, recommendations for further research within the area of tacit knowledge sharing are provided.

5.1 Research Question

The motivation of this study relies on the dilemma consulting companies face when over bridging the knowledge gap between its more experienced consultants who have accumulated plenty of knowledge and the novel ones. The problem arises because there is a lack of understanding regarding how this abstract process should be supported in a daily basis and how to improve it.

Our study case allowed us to obtain some illuminating insights to contribute on this matter and to answer our research question:

*What factors aid or hinder the process of sharing tacit knowledge within a consulting firm.*

In order to illustrate them, the main obstacles found within the tacit knowledge process will be presented as well as the positive conditions a firm has to develop to foster the sharing. In addition, managerial implications for the consultant industry will be offered by mean of recommendations to foster the sharing.

5.2 Hinders for Sharing Tacit Knowledge

PwC has implemented some activities to encourage knowledge sharing and collaboration such as their core values. The initiative to establish a knowledge management department at PwC Sweden is another step to enhance the process. There are still many factors working as barriers for the sharing of tacit knowledge within the company including lack of interaction and incentives to share.

The administrative structure at PwC can be illustrated as in Fig 8. This dividing of PwC with different departments for every line of service has created a company where the employees
have a good perception of the internal environment seen from their own departments view but has a deficient understanding of the internal environment of others.

Moreover the lack of interaction between levels within departments and the vertical communication channels to reach another department further complicates the integration of PwC staff. The time code system is another factor enhancing the administrative systems affect on consultants preferred working methods.

Figure 8 - Administrative Structure at PwC
Source: Our own

This lack of interaction has lead to the risk of conducting the same work repeatedly, decreasing the efficiency of the company.

Instead of working to render results as an organization the employees focus on creating result for the group of colleagues they work closely with within PwC. This has generated a culture where cooperation is strong within smaller groups.

The core values of sharing and collaborating have had a strong impact within the company but because of mentioned dividing of the staff it is only evident within more or less isolated groups of employees.
5.2.1 Knowledge Sharing With a Hindering Environment

The knowledge management at PwC has distinguished between three levels of knowledge where the distinctive level is stated to be PwC’s competitive advantage. This is also acknowledged by consultants as they are aware of the importance of the experience as the key knowledge to succeed in the consultancy industry.

We will now explain why the sharing of distinctive, tacit, knowledge is not higher within PwC even though the entire organization agrees that it is what will bring PwC a sustainable advantage for the future.

As PwC’s professional service is to support its clients the firms main objective is to handle their clients in the best possible way, providing them with efficient solutions to their problems. This focus has a strong connection to the sharing of knowledge within PwC as the organization can be viewed as a system where all knowledge acquired is shared to render results.

The boundaries for sharing knowledge is also closely connected to the administrative structure, hence the different departments work as separate entities acquiring explicit and tacit knowledge without sharing. The explicit knowledge is then shared with the senior managers and partners who work closely with clients as they deliver the result.

Figure 9 - Knowledge sharing process within PwC
Source: Our own
5.3 Theoretical Implications

We believe all companies must optimize the use of their knowledge. In order to give efficient recommendations on how to support the process of sharing tacit knowledge in practice to them, we will begin by illustrating a positive environment where the sharing can be done in a micro perspective, as in between two individuals. We will explain the separate conditions’ importance and affect upon sharing of tacit knowledge in the context of a consulting firm. We believe this micro environment to be fundamental for any sharing of tacit knowledge within any organization as the sharing is done on an individual level. It can have a positive implication for the entire organization if this positive environment is then multiplied among the organizations staff. The result of this will be illustrated further down.

Figure 10 – Positive environment for sharing tacit knowledge
Source: Our own
5.3.1 Arena for Sharing Tacit Knowledge

In order for tacit knowledge to be shared people need to be able to interact. By providing a chance for people to meet the most fundamental prerequisite is fulfilled. To encourage people to interact on this arena is also crucial as observation is only one part of the sensemaking process which provides a mere individual interpretation of the tacit knowledge transferred. Hence, rendering the risk of not being sufficient enough for any actual sharing to occur. Especially in the context of consulting firms as distinctive knowledge is what is demanded and since this knowledge is specialized it needs to be understood to meet the purpose.

5.3.2 Experience and Understanding

For tacit knowledge to be successfully shared once the arena is provided, transferor and recipient must understand each other. If the frame of reference of the two parties differs too much as a result of inefficient sensemaking or lack of experience their ability to share tacit knowledge decreases significantly.

As tacit knowledge work as a guidance for a persons behavior and even unconscious thoughts the complexity is on such cognitive level that people need to be able to understand each other with the help of observation, explicit knowledge and even contextual environment for the sharing to be successful.

To be aware of the existence of tacit knowledge and be familiar with the process of sharing it is also crucial understanding.

5.3.3 Willingness

Even if two people are in the same space with enough understanding of each other to communicate and share knowledge, the will still controls the process. This is important in all cases of tacit knowledge sharing but especially when the purpose is to share some specific knowledge which demands the interaction from recipient as well as transferor.
The willingness to share tacit knowledge can depend on several factors but the ones we identified as most crucial within consulting are:

- the reason for sharing
- the time aspect
- The relationship with the other person
- The reward for sharing

5.3.4 System for Knowledge Sharing With an Aiding Environment

By working to develop a positive environment the process of sharing tacit knowledge within a consulting firm as illustrated by Fig. 9 can change into a more efficient system as illustrated below.

![Diagram of knowledge sharing process with an aiding environment](source: Our own)

The next section provides advises to consulting firms on how to reach the efficiency illustrated in Fig.11 of sharing tacit knowledge that can over bridge the knowledge gap between generations and bring a sustainable competitive advantage for the company.
5.4 Managerial Implications

A number of recommendations will hereby be given to support a consulting firm or any organization committed to optimize the use of its knowledge in the design of a strategy for sharing tacit knowledge. For instance, an implementation of such strategy we believe can secure PwC’s position as market leader in the time to come and also over bridge the performance differences between junior and senior consultants within PwC as we have found. The recommendations are structured according to connection with the fundamental parts of the tacit knowledge sharing. This is to ensure that if they are fulfilled the entire environment of sharing tacit knowledge can be facilitated and improved.

5.4.1 Arena for Sharing Tacit Knowledge

To enable an arena for sharing tacit knowledge we want to recommend to implement a combination of centralized strategies and tactics, coordinated by a specific unit to facilitate, follow up and assess the progress. This will also avoid simplistic solutions. This can be done by having a structured department of Knowledge management.

Although this is not mandatory according to the global standards of PwC it can increase the possibility for the organization to manage an arena for sharing tacit knowledge holding 3600 people, including all Sweden’s staff. We have been in contact with some employees with experience from PwC in England and Colombia and they have ventured into this topic.

To enable an arena for tacit knowledge sharing within any organization we further recommend to:

- Improve formal methods to facilitate the sharing of tacit knowledge. One example is to consider peoples feelings and preference when allocating mentors. An official structure for the methods outcome is also advisable.

- Implement new methods as After-action review by introducing a policy stating that it is mandatory to write reports after a project is finished. The positive consequences would be increased awareness of who to approach when searching knowledge and moreover more time efficient as explicit knowledge will be gathered at one place,
saving time for asking for tacit knowledge. This should also be supported with the use of IT to create a system for reusing the knowledge.

- As the boundaries for knowledge sharing are closely connected with informal structures one way for the knowledge department to over bridge this obstacle is to implement Communities of Practices so that new people can meet and share experience.

- Give juniors the right setting for observing and receiving tacit knowledge.

- Open up channels for everyone to contribute with ideas to improve the knowledge sharing process will develop ownership from the employees to the program. Opening these kind of spaces for discussion will also help to identify key change agents.

- Social events are not guaranteeing the interaction between different departments or knowledge sharing in general. The organization need to host smaller events with the objective for new people to meet.

5.4.2 Experience and Understanding

The administrative structure seems to oppress employees to share tacit knowledge outside their department. This can be deduced to a cognitive perception of us and them. To overcome this barrier an overall corporate identity needs to be implemented in order to unite the staff. To increase the perceived importance and understanding of tacit knowledge sharing we recommend to involve the management and partners to a higher extent.

For a more united staff, a stronger corporate identity and better sharing of tacit knowledge we recommend a consulting firm to:

- Involve the leaders of the company in the knowledge sharing process and increase employees’ awareness of the process through embodiment and storytelling.
Within PwC one example to do this is to encourage the partners who seem to be highly respected among the staff, to talk about their experiences and why it is important for PwC’s future to share knowledge.

- Implement policies to address attention to the sharing of tacit knowledge. This facilitates the sensemaking process of the staff who can focus more on sharing tacit knowledge when the right opportunities arise.

- After the creation of formal knowledge sharing events, as recommended in the previous section, it is up to the knowledge management department to increase the importance of them among the staff.

- Increase the understanding regarding the benefits of tacit knowledge among consultants to motivate them into further initiatives of cross-loss communication and cooperation.

- Increase the understanding of the difference between data, information and knowledge to facilitate the search for knowledge in connection with project work.

- Follow up the strategical changes to ensure that the policies are implemented effectively and that the understanding of employees has reached a new, improved level regarding tacit knowledge transfer.

Some employees at PwC lack an understanding of how a PwC consultant should work and how to develop into a great advisor or consultant. By increasing the awareness of tacit knowledge and what is needed for it to be transferred these uncertainties can be managed.

We recommend PwC to:

- Include the Knowledge Sharing topic in the training programs and workshops in order to enrich understanding concerning basic concepts as well as develop skills to accomplish an increased tacit knowledge sharing. For this PwC can take advantage of consultants awareness of the importance of the tacit element learned through experience as a key knowledge to succeed in the consultancy industry.
5.4.3 Willingness

The sharing of tacit knowledge is entirely a voluntary process and it responds to a necessity: If the employees at PwC have the need or the will, they share. For that reason, Knowledge management department can not obligate people to do it; instead they can facilitate the process. As it is a matter of attitude it is crucial that people either realize their own personal benefit or the benefit for the organization in order to share their tacit knowledge.

This is what we recommend PwC and other organizations to create a culture where knowledge sharing becomes a natural part of work and something people feel they want to do:

- If the leaders are willing to participate actively in the knowledge sharing process people at PwC can take this as an incentive to take responsibility for their own knowledge sharing.

- This strategic plan needs participation on all levels. Involvement supports motivation which is a fundamental ingredient to reach changes. It is important to mention that all the levels need to feel they will benefit from this process. There is hence an important role of leadership in order to make sense out of this collective goal.

- For a more efficient, sustainable knowledge sharing an established reward system connected with individual and organizational goals should be implemented. This is not only to evaluate the progress but to see in which areas the sharing is insufficient and then include modifications to make the program better.

- Allocate resources to support knowledge sharing, especially time. As it is today the consultants are reluctant to use their hours for anything that will not render a result for their department.

- Simplify and improve the explicit knowledge systems to foster the tacit knowledge process by creating a virtual means to connect people and making the search for
knowledge more time efficient. This can create the extra hours needed to share tacit knowledge.

Furthermore we advice the management at PwC to encourage seniors to participate by rewarding them for sharing experience. Without the participation of these employees the knowledge sharing will be absent. The seniors’ purpose is not only to share but also to facilitate the process by being role models.

5.5 Research Reflections

After conducting our study we realised what an incredible learning process we have gone through. As future corporate leaders we both feel more aware of the importance of knowledge in today’s business world and the true complexity of the notion of knowledge management. When we now reflect upon the methods we have used during the study and our initial approach of handling tacit knowledge separate from explicit we realise some things could have been done somewhat differently.

As the interviews was conducted with representatives of one organization their loyalty for the company was not possible to avoid. By conducting a quantitative questioneer we could have increased the overall reliability by giving different statements and afterwards compared the consistency of the answers.

However, the answers we now received provided a picture of PwC as a highly respected and pleasant workplace but with inefficient knowledge sharing. This indicates that the consultants were aware of what they sought after to create an even better workplace despite their positive feelings towards their employer. In our case the subjective and open opinions was more valuable to create a picture of the entire process of sharing tacit knowledge then the employees answers to already given statements would have been. To bring the most reliable and rich answers we could thus have complemented our interviews with a questioneer.

We initially separated explicit and tacit knowledge to find a frame for the research problem and a base for the theoretical framework. As the study progressed we realised, after familiarising with both secondary and primary data, that the two types of knowledge is closely related and hard to separate. We decided to continue focusing on tacit knowledge for an academic purpose although the reality is somewhat different. We could see that whatever
was implemented to enhance the sharing of one type of the knowledge had an effect on the other type as well. We can recommend to expand this research to find a complete system where both tacit and explicit knowledge sharing is analysed so that the whole knowledge continuum (Lahti, 2000) can be understood.

As our understanding of knowledge as a concept developed we decided to change our initial wording of transfer of tacit knowledge into sharing of tacit knowledge. The phenomenon of tacit knowledge is not the same as for explicit knowledge when the knowledge is transferred via a document or computer system. People share tacit knowledge, it cannot be transferred from one person to the next. Instead the tacit knowledge is still in the possession of the “transferror” even though it is shared with the recipient who interpret the knowledge according to his/her own understanding.

The complexity of knowledge as a concept also became evident during our empirical research. The fact that our interviewees had difficulties to separate information and data with knowledge shed light on our own struggle at the beginning of our work. With a well developed theoretical framework we managed to overcome some confusion but after analyzing our empirical findings we saw that we could have explained the different concepts during our empirical work further to increase the understanding among our interviewees. This could have led to more questions directly concerning knowledge sharing instead of information or data.

5.6 Further Recommendations

First of all we want to encourage other researchers to repeat our study in a different setting as it would be interesting to see which factors affect tacit knowledge sharing in other type of organizations. Furthermore the importance of tacit knowledge might be different for other companies, especially if they are not professional service firms, and this could be evaluated.

Moreover we suggest to conduct a new study in the same setting as this research to test the importance of a knowledge management department as it was newly established in the organization for the time of our study. The model of the knowledge sharing within a consulting firm can with advantage be used as the base for that analysis.
APPENDIX 1

QUESTIONNAIRE

What knowledge do you consider most important for you to succeed in your work? Why?
What knowledge do you believe is most important for PwC to stay competitive? Why?
Does PwC able social activities for you and your colleagues? (previous empathy between agents foster the knowledge sharing)
What does knowledge gained from your experiences mean (as in how important, what role does tacit knowledge have) to you in your work?
What do you do to share knowledge?
Do you involve your colleagues in the knowledge sharing process? How?
Which persons do you share your experiences with? Why these persons?
Do you share knowledge with anyone who asks or someone you are sure will reuse the knowledge?
In what situations do you share knowledge with your colleagues?
Do you think informal social networks, coffee breaks lead to social dynamics to transfer meaningful experiences?
If you lack some specific knowledge, how do you chose someone to learn from: how do you trust in his/her knowledge? Why do you believe that person is reliable?
Is it important that you have met that person before you talk to him/her?
Mention your three main reasons for talking to a colleague.
Mention your three most used methods to communicate with your colleagues.
What knowledge do you feel you are lacking?
What are you prepared to do in order to acquire that knowledge?
If there were a system which provides richer information about the consultant’s profile, would you use it? Would you take the time to upload your own profile?
When are you faced to talk to a new colleague?
What would you change to share more knowledge with your colleagues? (Barriers for knowledge sharing?)
What people, department do you believe could influence this?
How did you learn your work when you began at PwC?
What are your experiences regarding mentoring/training during your time at PwC?
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