

Knowledge Management and Sharing Tacit Knowledge in an Expert Organization. Case: Ministry of Finance

Sanna Vihersaari



Author Sanna Viheraari	
Degree programme Degree Programme for Multilingual Management Assistants	
Report/thesis title Knowledge Management and Sharing Tacit Knowledge in an Expert Organization. Case: Ministry of Finance.	Number of pages and appendix pages 31 + 1
<p>Knowledge management and sharing are both important parts of most any organization, and an asset to employees. The sharing of tacit knowledge has become increasingly important, because it cannot be handled as data by computer based systems.</p> <p>The Ministry of Finance has acknowledged that knowledge, especially tacit knowledge, is an important part of defining any their work and knowledge base. Since tacit knowledge is something that cannot be stored in databases, the practices of sharing it or passing it on are extremely important.</p> <p>The aim of this study was to define the optimum practices for knowledge sharing, as well as for knowledge based teamwork. It also defines and recognizes coaching and mentoring as part of effective knowledge creation and sharing policies.</p> <p>It then looks into these practices and how the Ministry of Finance is encouraging and implementing such policies in order to stimulate knowledge creation, recognize tacit knowledge and share knowledge among employees. The thesis also evaluates how the practices are actually implemented and if they are working the way they were intended to work.</p> <p>The research was implemented as a traditional qualitative research, carrying out themed interviews among selected employees of the Ministry.</p>	
Keywords Tacit knowledge, knowledge management, knowledge sharing, mentoring	

Table of contents

1	Introduction	1
1.1	Background.....	2
1.1.1	The policies used in the Ministry of Finance	2
1.1.2	The age factor	4
1.2	Objectives and methods.....	4
1.3	Limitations.....	5
1.4	Structure of this thesis.....	5
2	The Ministry of Finance	7
2.1	The work of the Ministry	7
2.2	Organization	7
3	Knowledge Management and Sharing.....	9
3.1	Definition of knowledge	9
3.2	Tacit and explicit knowledge	10
3.3	Knowledge Management	11
3.4	Encouraging knowledge sharing	13
3.4.1	Low Care environment	13
3.4.2	High Care environment	14
3.4.3	Knowledge worker and team work	14
4	Coaching and Mentoring	16
5	Case Ministry of Finance.....	19
5.1	The research.....	19
5.2	Case study.....	19
5.3	Theme interviews.....	20
6	Analysing the Results.....	22
6.1	Questions about the policies and own knowledge and usage of the policies	22
6.2	Opinion on knowledge sharing opportunities in the work place	23
6.3	The tacit dimension of the work.....	24
6.4	Mentoring and coaching in the work place	25
6.5	Summary and conclusions	26
6.6	The research process and my personal learning.....	27
6.7	Reliability and validity.....	28
6.8	Developing knowledge management in the future	28
	References	30
	Appendices.....	33
	Appendix 1. Research questions.....	33

Table of Figures

Figure 1. Ways to develop expertise	3
Figure 2. The age structure in the Ministry of Finance	4
Figure 3. Different levels of knowledge	10
Figure 4. Explicit vs. tacit knowledge	11
Figure 5. Knowledge creation care levels	13
Figure 6. Key differences between coaching and mentoring	17

1 Introduction

This thesis is all about knowledge, the definition of knowledge and how it is used, managed and shared among experts within the organization in the Ministry of Finance.

Knowledge sharing and tacit knowledge have become increasingly popular subjects in the general discussion and as research topics. A quick search in Google Scholar (2015) or the thesis database on Universities of Applied Sciences Theseus (2015) will reveal, that they are being researched and used as key words and topics in various theses and research papers. A search with a key phrase “Tacit Knowledge” brought up 731 hits in Google Scholar and 875 in Theseus. “Knowledge Sharing” was even more popular in Google Scholar, 1880 hits and Theseus brought up 356 results. This reveals the demand for this kind of research.

But the academic world is not the only one acknowledging the demand for information on this matter. Just recently Aito HSO –magazine (2014) featured an article on knowledge sharing and knowledge as an asset. The article discusses knowledge, knowledge management and knowledge sharing and brings up similar concerns and points about them as this thesis. There is a need for more refined knowledge management systems and active creation for an environment, where employees feel comfortable to share their knowledge that is considered their asset. Hence, sharing this knowledge becomes an asset.

I will first discuss and define knowledge and the different levels and types of knowledge. I then move on to knowledge creation and enabling it in the work place. It is extremely important to be able to create an environment, in which knowledge workers can share their knowledge and work with it efficiently in teams. This benefits not only the employees but the organization they are working for. In relation to knowledge creating and sharing, I will also elaborate coaching and mentoring as policies for knowledge sharing.

Finally, I will report case research on the Ministry of Finance and how they try to manage their knowledge-heavy organization by offering policies and an environment for knowledge creation and sharing. I will also look into the employee’s point of view on how they have succeeded in creating the environment and transparent policies that all of them could recognize.

1.1 Background

During my internship in the Ministry of Finance, I noticed that the work they do is highly knowledge based and also highly dependent on experience and knowledge of history in the monetary and economic markets. Many aspects of the work are also public and regulated by the law. This kind of work is very sensitive to employee changes and the importance of orientation and training is obvious. Much of the knowledge and information is already visible and explicit, but there still are some parts of it that remain tacit and purely dependent on the person's own skills and history in doing the work. The Personnel department of the Ministry has already reported in 2003 in a work group publication, that it is crucial to develop and establish working policies to ensure knowledge sharing and competence of the employees of the Ministry (Valtiovarainministeriö 2003).

1.1.1 The policies used in the Ministry of Finance

The Ministry has acknowledged the nature of the work and also the need to share information and to integrate this sharing into the everyday work and work methods. They have established certain policies and work methods that encourage and push people to work together in teams and work groups. They also have many channels where all the information and results of your team work or your personal accomplishments can be published and shared with your colleagues and between departments. Figure 1 presents the policies that the Ministry has listed and recognized as a way for an expert do develop in their work.

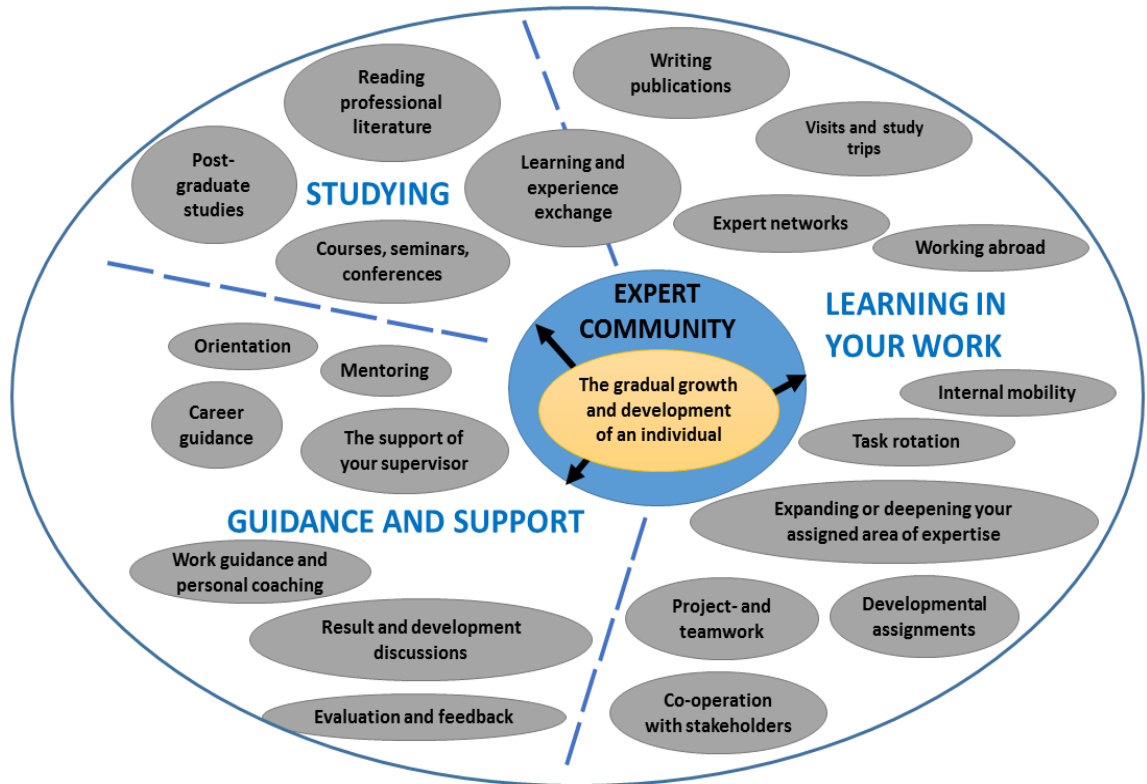


Figure 1. Ways to develop expertise (edited from the AKUT –project report)

These tools include an orientation program for a new worker, a so called government pass that gives you the basic information on what it means to work for the government and also basic preparedness to work for any government office. The method of work within the organization also usually includes a lot of team work and participating in different working committees that work with a certain project or research. You always work with a pair that has expertise in the same area as you but might have different perspective on the matters at hand. It is also common to ask for comments within your department or working committee on your input on the project or statement you are working on.

Another important channel to share information and the status of your project or the task you are working with are different kinds of meetings with your colleagues. There are regular unit meetings as well as departmental meetings where you can give your status update and hear, what your colleagues are working on. The meetings are also an important channel to share information on official policies and changes in those policies. A good way to receive feedback and give feedback on your personal performance and development are development discussions with your supervisor and/or the departmental manager. This can also be classified as sharing knowledge.

When you want to share the results of your work or your statement and make sure other people find them too, you can publish them in the electronic archiving system, Mahti. It is

mandatory to publish some of the documents in Mahti depending on your project, since the law regulates that the work of the Ministry should be public and transparent. These documents would be all the legislative preparatory documents, statements asked from the Ministry and the meeting paperwork from the public meetings of EU organs. Some other documents that are still in process are simply easier to find when they are saved in one place. Every department also offers a space in the intranet where you can share documents you need to work on with your colleagues.

1.1.2 The age factor

Even though sharing tacit knowledge should not be only associated with retiring and sharing knowledge as a part of the retiring process, it is a fact that the need for sharing information and knowledge arises when faced with this situation.

As Figure 2 below shows, the age development in the Ministry of Finance still has a large population of employees that will retire within the next two or three years' time. At the moment there are 43 employees out of 401 that fall into the category of 60-64 years (Valtiokonttori 2015).

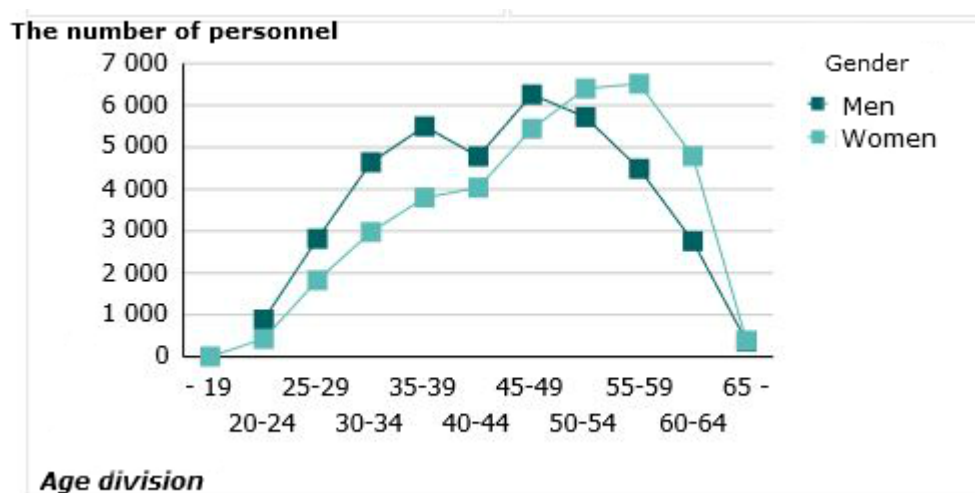


Figure 2. The age structure in the Ministry of Finance (Valtiokonttori 2015)

1.2 Objectives and methods

The purpose of this research is to find out, what kind of policies the Ministry is using to pass on tacit knowledge among their workers. It will be implemented as a qualitative research with help of theme interviews. This research is also a case study of the Ministry of Finance and any results and suggestions about improvements will be given based on the research results and interviews in the Ministry and applicable theories. The Ministry al-

ready has a set of guidelines and working practice, but they might need to be evaluated and some suggestions on improvements can be made.

1.3 Limitations

This research, like any other research, has its limitations. Even though the interviews I made were in depth and I was able to acquire more qualitative knowledge through them than e.g. a survey, the ratio of the number of employees interviewed compared to all of the employees was rather small, 10 interviewed employees out of 418 employees in total. The reason for this small sampling is, as mentioned, the nature of the interviews and also the fact that I felt that the sample was a rather good representation of the employees in the Ministry.

This small sample potentially has an impact on generalization of the findings of this research, but all and all, I did manage to find a comprehensive representation for the employees of the Ministry.

1.4 Structure of this thesis

In this thesis I will first present the background of the research. This includes presenting the reasons, why I wanted to do this research and commissioning party, the Ministry of Finance. My first chapter will explain the starting point, the existing policies and how they are meant to be used to develop the knowledge sharing in the working environment.

Second chapter will introduce the case organization, Ministry of Finance. In this chapter, I will elaborate on the kind of work the Ministry does and the expert nature of the work employees do there.

In the following chapters I will go through the main themes, which are knowledge management and sharing and as an additional element I have also looked into mentoring. In this thesis mentoring can be seen as a sub theme for the main theme of knowledge sharing. I then will discuss the qualitative research I did through theme interviews and the structure of my interviews. I will give an insight to the nature of my research and then will move on to my results.

Finally, I will be able to draw my conclusions and discuss the results of the interviews. I did find some reoccurring statements and ideas about knowledge sharing and how it is implemented in the Ministry of Finance. Based on my theories and the results of the re-

search, I will be able to give some recommendations and suggestions for future projects or research subjects.

2 The Ministry of Finance

The Ministry of Finance is part of the Government along with 11 other ministries. The Ministry provides a macroeconomic and fiscal policy framework for the Government to work with and offers their experience in tax policy matters and also drafts the annual Budget. Other responsibilities include the strategic policy on the financial markets, State employer and personnel policies and the overall development of government. In addition, the Ministry is in charge of the legislative and financial requirements of local government functions and participates in the work of the European Union and several international organizations.

2.1 The work of the Ministry

The Ministry works to safeguard stability and secure opportunities for growth, and to ensure a competitive tax system and the competitiveness and service provision of Finland's public administration. The Ministry's vision emphasizes the importance of stable economic development in order to safeguard the opportunities of future generations.

The Ministry of Finance is an expert organization whose activities are based on knowledge and research. The fields of expertise include but are not limited to domestic financial policies, international financial policies, law preparation and drafting, economic and financial stability of both Finland and the European Union and the employer policies of the Government. The Ministry values the competence, cooperation and openness of its personnel. A continuing objective is to recruit the best available expertise and develop the operations of the Ministry to meet the changing demands of the operating environment. In 2014 majority of the organization's employees were titled as some kind of experts either by using the word expert or advisor in the title. (Valtiokonttori 2015)

2.2 Organization

The leader of the Ministry is the Minister of Finance. The Government also often has another minister with responsibility for some of the areas covered by the Ministry. The division of responsibilities between the ministers is agreed when the Government is formed. The highest civil servant at the Ministry is the Permanent Secretary.

The Ministry currently employs about 400 people and is divided in seven departments: the Economics Department, the Budget Department, the Tax Department, the Financial Markets Department, the Personnel and Governance Policy Department (which also acts as the State Employer's Office), the Department for Local Government and Regional Admin-

istration and the Public sector ICT. There is an Administrative Governance and Development Unit, which includes the Media and Communication Unit and is also responsible for the internal management of the Ministry. Directly under the senior management is the Secretariat for International Affairs and Euro Area Stability Unit. The Ministry is also home to the Financial controller's function. (Ministry of Finance Website 2015)

3 Knowledge Management and Sharing

In this chapter I will discuss the definition of knowledge and tacit knowledge in particular. I will also comment on how tacit knowledge could be turned into explicit knowledge and how that knowledge can be stored, published and accessed easily. I will also elaborate the importance of creating an environment that encourages knowledge sharing and creation.

3.1 Definition of knowledge

knowledge

noun knowl·edge \ˈnā-līj\

: information, understanding, or skill that you get from experience or education

: awareness of something : the state of being aware of something

(the Merriam-Webster online dictionary, 2015)

Knowledge can be defined in many ways and in this work it definitely is the kind of knowledge that Merriam-Webster defines as understanding or skill that you get from experience or education.

Alan Frost (2013) has divided different types of information or knowledge into three categories: Knowledge, Information and Data (Figure 3 below). According to him, the nature of Data is simply non-organized facts and figures that can relay to something specific. However, data does not offer any further information regarding patterns or context. When data is arranged somehow in categories and given a context, it may become Information. Frost states, that “Essentially information is “found in answers to questions that begin with such words as who, what, where, when, and how many” Thierauf (1999)”. The highest level, Knowledge, links closely to doing and hence know-how and understanding (Frost 2013). That implicates that knowledge is a product of each individual’s own education and experiences.

This separation of the different levels of knowledge, information and data is a very crucial one when talking about knowledge and knowledge management. Data can be simply managed with computers and with some processing it can be changed into information with the help of a computer. Knowledge, on the other hand, is a more complicated entity and I have relied on this definition in my research.

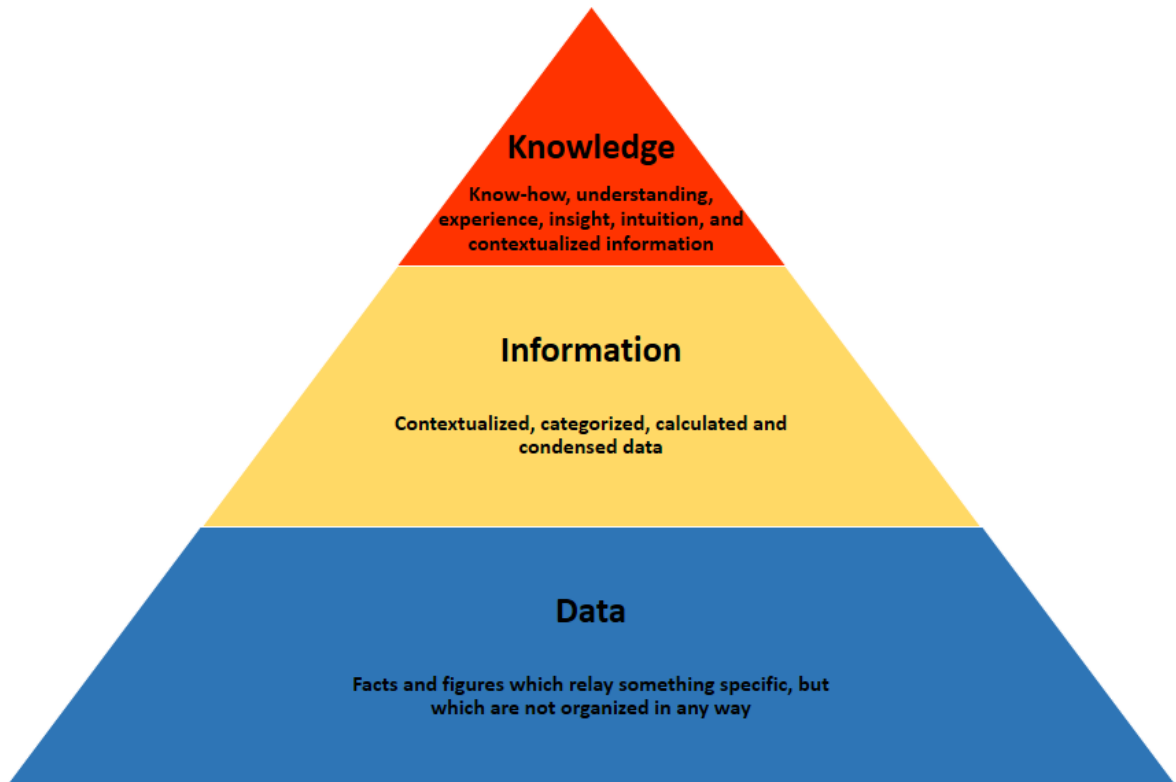


Figure 3. Different levels of knowledge (Frost 2013)

In the Figure 3, Knowledge is also defined as insight, intuition and contextualized information. These is a big part tacit knowledge, which will be defined in the following chapter. This very personal experience about knowledge makes it extremely challenging to share our knowledge thoroughly with other people.

3.2 Tacit and explicit knowledge

Knowledge can be divided into two categories, tacit and explicit knowledge. This division was first introduced by Polányi (1966). According to him, explicit knowledge is encoded and can be communicated in a systematic language. It means, that explicit knowledge is the kind of knowledge that can be easily expressed, written down and verified, such as minutes of a meeting or assembly instructions of a bookshelf. Tacit knowledge, however, is difficult to transmit, is coded in deeper and cannot be expressed or shared as easily. Tacit knowledge is based on person's skills and feelings as well as experience. Examples of tacit knowledge could be riding a bike, speaking a language or baking a perfect bread. The instructions can be there, but in the end, you can never explain *how* you eventually learn how to balance bicycle and steer it the same time. Or how a perfect bread dough feels on your hand as you are kneading it. All these skills require personal experience and a lot of practice.

Polányi’s division of tacit and explicit knowledge has been challenged by Kjeld Schmidt (2012), who states that dividing knowledge into these two categories would just mystify the practical knowledge that falls into the tacit knowledge category. In Schmidt’s opinion, that would mean that tacit knowledge would be something out of anyone’s hands and also not manageable. In this case Polányi’s original definition and the following definitions and explanations led from that one are quite accurate when talking about the kind of knowledge that experts need in their work.

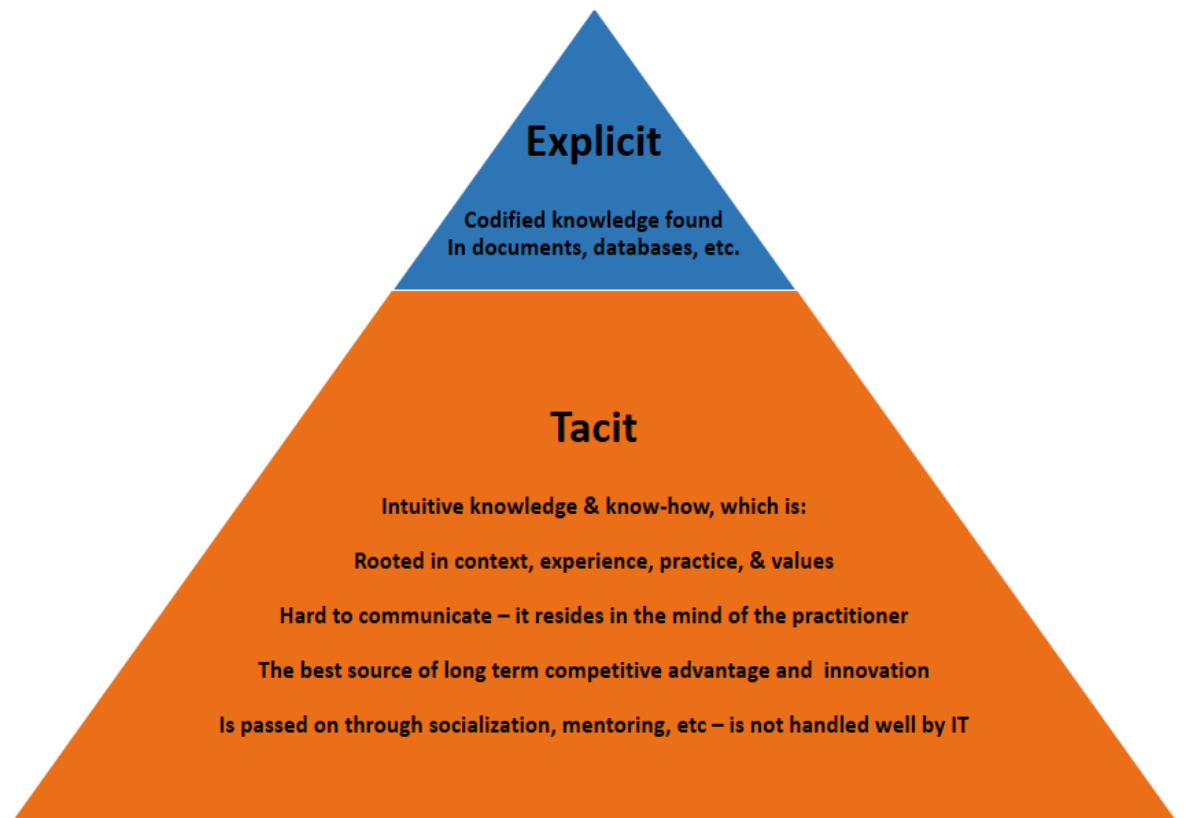


Figure 4. Explicit vs. tacit knowledge (Frost 2013)

Figure 4 is Alan Frost’s (2013) view on the division between tacit and explicit knowledge. It actually has a resemblance to an iceberg. The codified, visible knowledge is above the surface of the water and the hidden, tacit knowledge lies beneath the water line. How to get all or at least some of the tacit knowledge to surface and be seen and communicated more clearly is a matter of knowledge management and efficient knowledge communication and sharing.

3.3 Knowledge Management

The Business Dictionary (2015) defines knowledge management as “Strategies and processes designed to identify, capture, structure, value, leverage, and share an organiza-

tion's intellectual assets to enhance its performance and competitiveness". According to the same definition, the two critical activities knowledge management is based on are capturing and documenting individual occurrences of tacit and explicit knowledge as well as their integration in the organization. It basically means that the knowledge that is relevant should be recognized and recorded somehow in the every-day work of the organization. According to Smith (2001, p. 313), knowledge management can be divided into four areas of action:

- Managing tangible intellectual capital
- Gathering, organizing and sharing the company's information and knowledge assets
- Creating work environments to share
- Transferring knowledge among the workers and leveraging some of the knowledge also from the stakeholders

With managing tangible, intellectual capital the organization can identify and keep track of the assets they already have that have some kind of concrete value to them. By gathering, organizing and sharing their information and knowledge assets, the organization will be able to manage their knowledge and knowledge sharing more efficiently. Creating environments to share and actively transferring knowledge among the workers will make it much easier for the employees to seek knowledge and make their own more visible by sharing it.

With this kind of an action proper steps will be taken to ensure the sharing of knowledge and tacit knowledge and using them to build a knowledge base and finally strategies for a company or organization.

Sydänmaanlakka (2002, pp.139-142) has the same kind of ideas as Smith a little more in detail. According to him, knowledge management has five sub processes:

- Creation – creating knowledge
- Capture – capturing knowledge, e.g. participating in courses, reading books, internet searches
- Storing – created or captured knowledge has to be stored and brought available to others as well
- Sharing – knowledge should be shared in different ways to ensure the availability to all
- Application – putting the acquired information and knowledge to use

These sub processes are designed to make knowledge easily available and that it will also be used for the organization's benefit. It does not benefit anyone if the employees have to search for the same knowledge or information over and over again, when it has already been acquired and stored. Then it is up to the organization to enable and encourage the publishing (sharing) and application of knowledge.

3.4 Encouraging knowledge sharing

In order to share knowledge and have some knowledge to manage, it is crucial to create an environment, where employees feel comfortable and safe to share the information and knowledge they might have. Krogh, Ichijo and Nonaka present a concept of knowledge creation and care illustrated in figure 5. I will open these levels of care in the following subchapters.

Knowledge Creation when Care is High or Low		
	Individual knowledge	Social knowledge
Low Care	SEIZING Everyone out for him- self	TRANSACTING Swapping documents or other explicit knowledge
High Care	BESTOWING Helping by sharing in- sights	INDWELLING Living with a concept to- gether

Figure 5. Knowledge creation care levels (Krogh et al. 2000, p. 55)

3.4.1 Low Care environment

According to Krogh et al., if the employees of a company feel threatened in their positions and the company environment does not encourage knowledge creation and sharing (Low Care), they start to seize individual knowledge and keep it to themselves. As the employees know, their future in the company depends on their expertise. That leads to them keeping their own special knowledge and information hidden from their colleagues and in some circumstances might swap information against some other valuable piece of information, "document to document".

When a new employee starts in this kind of an environment, they are often left to themselves to learn the work, usually through trial and error. Usually listening to others and helping them is seen as a waste of time, since it is not encouraged. This leads to all of the new ideas being judged even harshly and any new concept or idea is not welcomed by the people around you.

3.4.2 High Care environment

In a completely opposite situation, the care and support level of knowledge creation and sharing is high. The employees feel safe when working in this environment, because when knowledge is not the only thing you can defend your position with, it becomes a shared resource and everyone feel comfortable contributing to the common knowledge base. It would be a lot easier to work in this environment, because your colleagues share their information with you and care about your progress and how you develop in your job.

Presenting new ideas and suggestions is welcomed and even if they are not presented in any official way, the employee is allowed to refine and explain the idea further and in this way also share their tacit knowledge with their colleagues. This way knowledge is created while sharing it with others and everyone gets to benefit from it in their own work. Indwelling has a particular importance in sharing tacit knowledge and creating new concepts. It allows you to shift from looking at the concept to looking with the concept. This means that one should always go further from explaining the concept into implementing or using it some way or another.

3.4.3 Knowledge worker and team work

In the Ministry of Finance, majority of employees can be defined as knowledge workers and experts according to their titles and areas of expertise (Valtiokonttori 2015). Knowledge worker is a person, whose work is “primarily intellectual, creative and non-routine in nature, and which involves both utilization and creation of abstract/theoretical knowledge” (Hislop 2009, p. 71). The experts working for the Ministry of Finance have a great pool of knowledge and expertise to share with each other and to the benefit of their employee. As I already mentioned in chapter 2.1, the work of the Ministry is strongly based on knowledge and research.

Team work is a good way to combine the knowledge base of the experts and also share and create new knowledge. Margit Osterloh has listed three main ideas that define some of the characteristics of knowledge workers and teamwork (Ichijo and Nonaka 2007, p. 160-161):

Firstly, in order for the team work to be effective among knowledge workers, the knowledge among the team members has to differ from each other. The team leader is also one of the key members, as (s)he should have enough knowledge on the matter at hand to acknowledge the quality of the work and the results. However, there is a risk that if the team leader knows more on the issue than the employees working on it, they might

hide their own tacit knowledge in the process. Simply, because they do not need to express it.

Secondly, the result of the team work will be at least partly explicit knowledge that will be published for all of the workers to see and use. This does present a problem with an individual employee's personal tacit knowledge and the idea of their knowledge being their asset that differentiates them from the other employees. Not everyone wants to share theirs. Osterloh calls them selfish knowledge workers. However, if the environment is right as in chapter 3.4.2, this problem should not occur.

Thirdly, knowledge workers have much more bargaining power in relation to their employer than manual labourers. The knowledge they possess might be very difficult if not impossible to replace if they leave the organization. However, if the employee's knowledge is very specifically related to the organization, this does balance the situation. This gives all the more reason for the employer to create an environment where it is beneficial to share information and knowledge among the employees.

4 Coaching and Mentoring

Coaching and mentoring can be very effective ways to pass on and share information with your colleagues, employees or protégé, the person being mentored. There is a difference between these two methods, but they are both very useful and valuable ways to share both explicit and tacit knowledge.

Mentoring as a relationship can be formal or informal. Many organizations, like the Ministry of Finance, have official mentoring programmes that the employees can participate in (Conway 1998, p. 12). When forming a mentoring relationship within a programme in a formal setting, the mentoring usually has a time frame and one has to plan, set goals and report the results of the mentoring relationship. In this kind of a mentoring programme, the mentor is usually found within the organization. Informal mentoring relationships can occur in any setting, work or free time and be career or life mentoring. These relationships usually form naturally between two people, who somehow have the same background or share the same interests or career goals. They are in different stages or situations in their career and hence the more experienced one is in the position to give advice and mentoring. Informal mentoring relationships can last a lifetime and even though the organization employing the mentoree can still benefit from it even though the focus is on his or her personal career (Management Mentors, 2015).

Coaching is more of a need-basis, process that is used to address smaller entities. It can be used by managers and supervisors to solve performance problems and develop employee capabilities (Harvard Business Essentials 2004, p. 2). Coaching can focus on a problem or matter at hand, or some particular task you are having trouble with. Coaching can be used to reach larger goals but it always focuses on one smaller task or a step on the way to the goal at the time.

Coaching and Mentoring: Key Differences		
	Coaching	Mentoring
Key Goals	To correct inappropriate behaviour, improve performance, and impart skills that the employee needs to accept new responsibilities.	To support and guide personal growth of the protégé.
Initiative for Mentoring	The coach directs the learning and instruction.	The mentored person is in charge of his or her learning.
Volunteerism	Though the subordinate's agreement to accept coaching is essential, it is not necessarily voluntary.	Both, mentor and protégé participate as volunteers.
Focus	Immediate problems and learning opportunities.	Long-term personal career development.
Roles	Heavy on telling with appropriate feedback.	Heavy on listening, providing a role model, and making suggestions and connections.
Duration	Usually concentrates on short-term needs. Administered intermittently on an "as-needed" basis.	Long-term.
Relationship	The coach is the coachee's boss.	The mentor is seldom the protégé's boss. Most experts insist that the mentor not be in the other person's chain of command.

Figure 6. Key differences between coaching and mentoring (Harvard Business Essentials 2004, p. 79)

Figure 6 above lists the main differences between coaching and mentoring. The definition of coaching has developed since to be more of an interactive process than the figure presents. Coaching does not mainly focus on correcting problems or inappropriate behaviour (Key Goals), it can also be focused more positively on reaching goals one smaller step at the time. I also think that your coach does not have to be your superior in the chain of

command (Relationship), but peers can also coach each other in reaching their targets and refining their focus on the task at hand. The mentoring side on the other hand, defines mentoring quite well. Mentoring and coaching are or can be somewhat closer to each other than the figure portrays. They are however two separate processes and can be used, as seen in Figure 6, for different purposes.

5 Case Ministry of Finance

I found the Ministry of Finance an extremely interesting subject for my research. As mentioned before, the work they do is extremely knowledge and research based and as such knowledge management should play a large role. As I was conducting my interviews, I got to meet a variety of different kinds of people and personalities with absolute expertise in their own areas of work. Majority of them had some kind of an idea or opinion on knowledge management and also on how it is implemented or how it should be implemented in the Ministry.

I did my research as a case study and used a qualitative method of semi-structured theme interviews. This way I was able to converse with my interviewees and also had the opportunity to ask follow up –questions if I needed to elaborate on some ideas or answers.

In this chapter I will discuss my research methods, why I chose them and conducting my research.

5.1 The research

I chose the qualitative research method because I felt that with a topic like this, it is crucial to be able to have more of a conversational approach to the research questions and interviews. I think that with my research topic it was important to be able to explain, what tacit knowledge is and in return find out, how the interviewees understood the term. That made it easier for me to interpret the answers and also later on the results of the research.

According to Ghauri and Grønhaug (2005, p. 110), qualitative research method emphasizes usually more of the understanding and interpretation point of view rather than the testing and measuring of data. The orientation is more of explorative and has a subjective “insider view” and closeness to data. This is what I was looking for from my research.

5.2 Case study

Ghauri and Grønhaug (2005, p. 114) state that it is particularly useful to do the research as a case study when the concepts and variables under study are difficult to quantify. This is one of the reasons I chose to do my thesis as a case study. In this case I was interested specifically in the tools and policies used in the Ministry of Finance and understanding them. According to Stake (1995, p. 4), this is the core of a case study, to understand that one particular case.

I also chose to do a case study because the Ministry is a very interesting subject by itself. Due to the expert and specialist nature of the work that they are doing, it is extremely important to try and study the Ministry as a unit and make suggestions based on their existing policies to make their work more efficient and more informative.

5.3 Theme interviews

I decided to use a semi-structured –interview method to collect my data. In this kind of an interview there is a specific frame and some pre-meditated questions, but as an interviewer I could also decide to ask follow –up questions and specify some answers (Rugg & Petre, p. 138). There was a set of questions I had listed and also sent to my interviewees were not in any particular order on the question sheet (Appendix 1), but during the interview I grouped and re-arranged them together depending on their theme (Appendix 2), the person I was interviewing (e.g. questions about retirement and how they were supported during the process did not apply for everyone) and also if they could be answered based on the information available to them or if answering the question needed some kind of deduction or giving an opinion. In this case, the themed interview was a good way to go since I wanted to reflect the opinion and expertise of these individuals and get them to speak freely of their own experiences on the policies and how they thought the Ministry had succeeded in implementing them. (Schorn, p. 2).

I interviewed 10 people from different organizational and career levels as well as departments. The ages varied from 30-65 and I had interviewees from both genders. I had 18 questions and they were arranged in different themes and followed based on what kind of answers I got to my questions. Sometimes I could skip a question if I got the answer to it from an answer to another question. I could also ask some specifying questions and elaborate them if needed.

The structure of the interview was to first introduce the topic and ask the interviewee about their work and role in the organization. I then started with the actual interview questions, having a conversation with my interviewees along the way, commenting or giving more information where necessary. When I had gotten answers to my questions, I also gave a chance for the interviewee to give some more insights concerning the subject or what they thought of it. The situations were very informal and I found the interviews very interesting and also very enlightening for myself as well. The people working for the Ministry of Finance seem to be very dedicated to their work and also think about sharing their own expertise and knowledge in their everyday work.

I conducted the interviews mainly within two weeks and interviewed two people in one day. That way I had time to interview the person and write my notes in the interview. I also had time to reflect on the discussion and the answers after the interview to draw up some conclusions already based on that particular interview. After a couple of meetings, I started to see a clear pattern and noticed that even within a relatively small group of people, the same issues and features of the knowledge management and sharing of the knowledge between the specialists started to emerge.

6 Analysing the Results

In this chapter I will open up the questions I asked during my interviews and elaborate some of the answers and the trends that I found among the answers. Even though the sample group was rather small, I think I could detect some trends in the answer pool that should be taken into more consideration and be researched further. I think that as a research to confirm some of the information I already had of the Ministry and the policies used there, this small research is a valid one and could work as tentative report on how the policies work and are found to be useful.

6.1 Questions about the policies and own knowledge and usage of the policies

3. *What kind of policies does the Ministry have to share knowledge?*

4. *Do they also enable sharing and publishing tacit knowledge? How?*

5. *Which of the following policies have you used yourself?*

- *The orientation programme for a new employee/official*
- *The mentoring programme between ministries*
- *Working in pairs*
- *Working in teams/groups*
- *Sharing information in Mahti*
- *Publishing information on the department workspace (in the intranet)*

8. *Which official or unofficial policies are used in your own working environment to share knowledge?*

This first set of questions were the kinds of questions that the interviewee could answer based on what they had observed or done themselves.

For this set of questions the trend was that there were policies that were used and also recognized as official policies such as the working in pairs and in different theme/work groups or teams. Some additional policies that the Ministry uses but I had not mentioned on the list were added, such as commenting through emails, unit- and departmental meetings and also the developmental discussions with supervisors. More personal opportunities for knowledge creation and sharing were travelling with colleagues to international meetings and courses that an employee could take to add to their own knowledge base. Majority of the interviewees did recognize the official policies in sharing knowledge and like mentioned earlier, could add some of their own to the list. The official policies were also the policies that were used in their own working environments.

When it comes to publishing knowledge or making tacit knowledge more explicit, the policies where the employees communicate with each other personally were found the most effective ways. Publishing the knowledge or information, however, was found trickier. One of the interviewees said that it is possible, but it takes some inventiveness to implement. Of course the basic, explicit knowledge of a meeting or the topics are already there in the form of meeting documents, agendas and finally minutes. The report that an employee participating in the meeting writes of the event was seen as more important channel to share one's own views and knowledge and above all opinions. This way you can share your own expertise and make your personal knowledge more visible among your colleagues and stakeholders.

Some of the unofficial policies mentioned were talking about work related issues in the coffee room or in the corridors or conversations with your work pair or the person sharing the room with you. This set of questions revealed, that the policies the Ministry has set and wants their employees to follow are well recognised and followed as well.

6.2 Opinion on knowledge sharing opportunities in the work place

- 1. Do you think that the knowledge and skills needed in your work can be shared? How?*
- 6. Have you been encouraged to share your knowledge with others and how have you tried to share it?*
- 2. How would you want to share your knowledge with others?*
- 7. What do you think is the most efficient way of sharing knowledge?*

This part of the interview was perhaps the most difficult one for the interviewees, because it required a lot of self-reflection and was based on opinions and feelings about how things are working and how they should work.

All of the interviewees thought that the knowledge and skills needed in their work could be shared. A third of them felt that the knowledge was already shared quite efficiently by working together with colleagues regularly and sharing ideas while working. The rest agreed on the fact that the best way to share the knowledge and skills would be by talking about the work and working together with a colleague. Thus, that would be the most efficient way to share knowledge among colleagues.

Majority of the interviewees felt that they had been encouraged to share their information but it was more on the departmental level and was mostly an atmosphere of discussion and asking questions. One interviewee found that they had not been encouraged in any

particular way. From the answers I got I did get the idea that in general sharing knowledge was encouraged by the employer but not especially supported any further than the encouraging atmosphere and suggestion. This would make the environment a High Care one but the encouragement is not quite being followed through.

6.3 The tacit dimension of the work

10. What kind of knowledge do you think is tacit knowledge?

9. How large part of the knowledge you need in your work do you think is tacit knowledge?

12. How do you think that tacit knowledge could be made more explicit? Do you think the Ministry offers the tools or policies to do so?

11. How did the Ministry policies enable you to share your tacit knowledge when you retired?

These questions opened up more of the tacit dimension. I had been asking questions about tacit knowledge earlier in the interview, but at this point all the interviewees had a chance to define tacit knowledge themselves.

Tacit knowledge was portrayed as knowledge that was dependent on the person having it. The ideas of tacit knowledge were pretty much along the lines of the definition of tacit knowledge (chapter 3.2) but with some added elements. In addition to the knowledge that experience brings, also the networks and knowledge of the history of your area of expertise were mentioned. "There is no future without history", is a direct quote from one of the people interviewed. This also falls into the same category with knowing background information on the people and events that you deal with in your work. Networking and "knowing who to turn to", that could be translated as relationships were a clear trend among the answers.

When asked about, how large a part of the work or field of expertise required tacit knowledge, the answers varied a lot. Some of the interviewees felt that the amount of tacit knowledge needed depended on which task or issue they were targeting and some of them just estimated the need for tacit knowledge according to the field or area of expertise they were working with. People that were or had been in supervisory positions or even supporting them estimated the majority of their work consisting of using tacit knowledge or the need of it.

I found it remarkable, how all of my interviewees seemed to agree on the fact that tacit knowledge should be made more explicit and that knowledge should be shared. They felt

that knowledge is not power that should be kept hidden but rather that it should be put out in the open and refined together for the good of the Ministry. Not one of the interviewees felt that their position would be threatened by sharing what they know. There were a couple who did mention that certain colleagues did have that mentality and thus were difficult to work with. That mentality even interfered with the efficient work of the department. This means that the Ministry has in many ways managed to create a safe, high care environment to do your knowledge work and work in teams. One topic, however, did come up during several interviews: even though people within departments were more than happy to share their insights and knowledge, the different departments within the Ministry were not working so well together. The situation was described as the departments being separate silos or even the Ministry being divided into seven different Ministries. This is clearly an issue that should be addressed.

The last question on enabling sharing tacit knowledge when retiring only addressed a part of my interviewees but they all did agree that when retiring, there is an air of urgency that dictates the knowledge sharing and coaching the person who will take upon the tasks of the retiree. The problem is, that there isn't always a person to follow and take up their work when they retire. The situation might be that there will not be one person continuing in the same position. Another scenario is that the person who might continue the same work, cannot start the work and co-operate with the retiring person before they leave.

6.4 Mentoring and coaching in the work place

- 13. Do you think there should be official policies for using retired experts in mentoring or consultative roles?*
- 14. Do you think you have been in an informal mentoring relationship in your work?*
- 15. If you have, which role was it?*
- 16. Is coaching colleagues one of the working methods used in your department? Do you see that your own role is suitable for that?*
- 17. Would you be willing to have a mentoring relationship of some kind?*
- 18. Do you feel that mentoring would help you in your work?*

When I was gathering the background information about the Ministry and their policies for the research and interview questions, I learned that at least one of the departments had also used retired experts to work as consultants in projects, where their expertise and especially the extensive network and history knowledge could be used. That is why I wanted to ask my interviewees, if they felt that this should be an official policy. Most of them thought that it would be a good idea provided that the retiring employee would be

interested to do so upon retiring. However, all of the retiring or retired people interviewed were not interested of doing so themselves.

Mentoring divided the answers a lot. Even though the Ministry has a mentoring programme, only one of the interviewees had participated in it. Most of the interviewees had not been in a mentoring relationship, one or two had been or were in an informal mentoring relationship. Most of the interviewees were interested in a mentoring relationship and felt that it would help them in their work.

Coaching and sparring colleagues was a common phenomenon since the environment created by the Ministry allowed it. The kind of coaching that the employees did was not limited to the supervisor-subordinate –kind of coaching but it was used as a tool among peers. An example of this could be going to a colleague for help when some issue seemed a bit tricky or difficult to solve and using them as a sort of a base to bounce ideas off of. In the process the colleague could give their opinion on the matter and maybe some suggestions on how to improve the quality of the work or report. Like in Figure 6, the focus would then be on the task at hand and solving it in order to make progress.

6.5 Summary and conclusions

To summarize the content of the research, the employees of the Ministry of Finance are aware of the fact that their work is very knowledge-dependent. They seem to enjoy their work, but there is also an air of not being able to share all the knowledge and information they would like due to the workload. The employees are immensely busy all the time with their work and deadlines. As a result, they would perhaps like to elaborate some issues and make some background information more visible, but are forced to summarize and keep things simple while making their knowledge explicit. In the words of one of my interviewees: “The employees find their work they do important and are committed to it. That means that they do not want to use their time on functions that do not advance their work”.

This creates a need for some serious development of the managing policies and enabling the employees to concentrate on their own area of expertise even more. That would also free some time and energy on making also the tacit knowledge more explicit. Developing the policies could include rearranging the knowledge management to be more of a shared management issue instead of confiding it in the departments. There is also a definite need to develop co-operation between the departments. This could be done by opening discussions about sharing knowledge and expertise over departmental borders.

The Ministry of Finance is definitely going in the right direction and already implementing some of the steps or processes that were established by Sydänmaanlakka (2002) and discussed in chapter 3.3. There are policies for creating knowledge and capturing and storing it. Knowledge is shared very willingly and it definitely is also put to use in many ways, such as giving statements, preparing laws or working as an expert in committees and boards in Finnish and international organs.

Team work also is an important part of the work in the Ministry and it is encouraged and led with expertise. There are experts from different areas of expertise working together to share and create new knowledge. This coincides with Osteloh's (Ichio & Nonaka 2007) theory of effective team work I discussed in chapter 3.4.3.

6.6 The research process and my personal learning

I think that my research and thesis process was a little too scattered when put onto a timeline. I did my background research and conducted my interviews in October and finally started writing out the theoretical part and my research findings and conclusions in January. The writing process was a surprisingly painful one, considering that I already knew what I wanted to write about and also the themes my thesis was built upon.

What I have mostly learned about this is that I really need to start managing my time better and also arrange my work in a way that I have some kind of an incentive keeping me in my writing process and in the topic. One good way I found that kept my mind and thoughts tightly in the subject and task at hand is the pomodoro technique (Cirillo 2015). The technique in its simplest form is 25 minutes of work/studying and a 5-minute break in between study periods. After 4 such periods you are allowed to take a break. You just decide, what you are going to work on before starting your 25 minutes and write down afterwards what you have been working on. This method worked with me, because it has a pre-set time to concentrate on the subject and the subject alone. That gave me a goal I would always want to achieve. I was also able to forget all of the possible distractions, because I always knew, when I would be able to address other issues.

I also learned a great deal of the work the Ministry of Finance does. I had a chance to meet brilliant people who are absolutely competent in what they do and are also very committed to their employee. I did find myself that the current issues the Ministry is dealing with are very public and very topical even on international level. I was also glad to be a part of it during my internship and research period.

6.7 Reliability and validity

The results of this research are reliable in the sense that I wanted to see, how the employees of the Ministry of Finance felt about the policies offered to share knowledge and how they use them. I got to interview people that had done especially fundamental work in starting and developing a new organization within the Ministry and whose work consisted of actively considering and implementing knowledge management and knowledge sharing principles.

Other interviewees worked with these topics and their development either within their own field of expertise or had participated previously in developing or researching these policies and implementing them. Then there were people who just worked with the policies and used them in their everyday work. So even though the sample was rather small, I managed to capture a wide variety of the different types of the employees in the Ministry and especially the ones that represented the majority of the employees, experts and knowledge workers.

According to Rugg & Petre (2007, p.31), research involves finding something new. Whether it is new to everyone or new to yourself. I believe that I managed to find something for both, to everyone involved in the research and to myself as well. I think that some things that have been somewhat common knowledge among the employees in the Ministry have now been written down as explicit knowledge and information and can be researched further if found necessary.

6.8 Developing knowledge management in the future

The issue that did come up as a trend in my interviews was that there are policies that are recognized as official policies but that many of the people interviewed felt that they were not clearly stated or published anywhere. This should be addressed and maybe inform the departments and their managers more clearly, where the information on knowledge sharing and especially where the information and knowledge could be found in general.

Another issue is the divided nature of the Ministry. Different departments being in separate silos does not help this knowledge based organization thrive in the way that it could. I understood from some of the comments of my interviewees that even though knowledge sharing is very openly supported within the departments, they still feel that departmental issues or are not something that could be shared with the other departments. In this case perhaps the management of the department feels that knowledge is power indeed. This

also is one of the reasons that it is difficult to rotate employees between departments so that they could learn other roles and about the work the other departments do.

Future research topics around this subject or based on this research could be researching more widely on quantitative terms, how the employees in the Ministry of Finance find and share knowledge in their everyday work. There would also be a need to start actually implementing and informing about some of the policies in knowledge sharing to enable more efficient sharing among employees and especially between different departments. This way the crucial knowledge and especially the tacit knowledge the experts working in the Ministry possess could be shared and used more widely.

If there is a need to create a whole new system on passing on and sharing tacit knowledge that would also be a good opportunity for a new thesis project. Creating a new set of guidelines and implementing them would be quite a large project and will require some additional research and workshops to complete. In any case, there is some work to be done in terms of collaboration and knowledge sharing within the Ministry and among the departments.

References

Cirillo, F. 2015. The Pomodoro Technique. URL: <http://pomodorotechnique.com/>. Accessed: 8.3.2015

Conway, C. 1998. Strategies for Mentoring: A Blueprint for Successful Organizational Development. John Wiley & Sons Ltd. Chichester.

Frost, A. The Different Types of Knowledge. 2013. URL: <http://www.knowledge-management-tools.net/different-types-of-knowledge.html>. Accessed: 24.2.2015

Ghuri, P. & Grønhaug, K. 2005. Research methods in business studies. 3rd ed. Pearson Education Ltd. Harlow.

Google Scholar 2015. "Tacit Knowledge". URL: http://scholar.google.co.uk/scholar?q=%22Tacit+Knowledge%22&btnG=&hl=en&scisbd=1&as_sdt=0%2C5. Accessed: 8.3.2015

Google Scholar 2015. "Knowledge Sharing". URL: http://scholar.google.co.uk/scholar?hl=en&as_sdt=0,5&q=%22knowledge+sharing%22&scisbd=1. Accessed: 8.3.2015

Harvard Business Essentials. 2004. Coaching and Mentoring: How to Develop Top Talent and Achieve Stronger Performance. Harvard Business School Publishing Corporation. Boston.

Ichio, K & Nonaka, I. 2007. Knowledge Creation and Management. Oxford University Press. New York.

Management Mentors. 2015. URL: <http://www.management-mentors.com/resources/corporate-mentoring-programs-faqs/#Q7>. Accessed: 8.3.2015

The Merriam-Webster Online Dictionary. 2015. URL: <http://www.merriam-webster.com/dictionary/knowledge>. Accessed: 28.2.2015.

The Ministry of Finance 2015. URL: <http://vm.fi/en/ministry>. Accessed 8.3.2015

- Rugg, G & Petre, M. 2007. A Gentle Guide to Research Methods. Open University Press. Maidenhead.
- Schorn, A. The "Theme-centered Interview". A Method to Decode Manifest and Latent Aspects of Subjective Realities. 2000. URL <http://www.qualitative-research.net/index.php/fqs/article/view/1092/2396>. Accessed 28.2.2015
- Schmidt, K. 2012. The Trouble with 'tacit knowledge'. URL: http://www.academia.edu/1784760/The_trouble_with_tacit_knowledge. Accessed: 8.3.2015
- Stake, R. The Art of Case Study. 1995. Sage Publications Inc. Thousand Oaks.
- Sydänmaanlakka, P. 2002. An Intelligent Organization: Integrating Performance, Competence and Knowledge Management. Capstone Publishing Limited. Oxford.
- Theseus 2015. "Knowledge Sharing". URL: http://theseus.fi/search?scope=%2F&query=%22Knowledge+Sharing%22&rpp=10&sort_by=2&order=DESC&submit=Hae. Accessed: 8.3.2015
- Theseus 2015. "Tacit Knowledge". URL: http://theseus.fi/search?scope=%2F&query=%22Tacit+Knowledge%22&rpp=10&sort_by=2&order=DESC&submit=Hae. Accessed: 8.3.2015
- Valtiovarainministeriö. 2009. Asiantuntijoiden Kehitys- ja Urapolut Valtionhallinnossa. URL: <http://vm.fi/documents/10623/307715/Asiantuntijoiden+kehitys+ja+urapolut+valtionihallinnossa+Raportti+2009.pdf/8f2ca36e-4445-4062-9b3a-b8fa76d01612>. Accessed: 23.2.2015
- Valtiovarainministeriö, Henkilöstöosasto. 2003. Haasteena Tuleva Osaaminen. Edita Prima Oy. Helsinki.
- Valtiokonttori. 2015. Netra –raportti Valtiovarainministeriön hallinnonalan tunnusluvut. URL: <http://www.netra.fi> -> Henkilöstö-> 28 Valtiovarainministeriön hallinnonala-> Valtiovarainministeriö: Tammikuu 2015. Accessed: 8.3.2015
- Viitasalo, K. 2014. Tieto on Voimaa. Aito HSO 4/2014. 42. Vuosikerta. Erweko Oy. Helsinki.

Von Krogh, G., Ichijo, K. & Nonaka, I. 2000. Enabling Knowledge Creation. Oxford University Press. New York.

Appendices

Appendix 1. Research questions

1. Tuntuuko sinusta, että työssäsi tarvittavia tietoja ja taitoja voi jakaa? Miten? (esimerkki)
2. Miten olisit halunnut jakaa omaa hiljaista tietoasi toisten kanssa?
3. Minkälaisia käytänteitä ministeriöllä on tiedon jakamiseen?
4. Mahdollistavatko ne myös hiljaisen tiedon julkaisemisen/muuttamisen julkiseksi tiedoksi? Miten?
5. Mihin seuraavista käytänteistä olet itse osallistunut?
 - Uuden virkamiehen perehdytysohjelma
 - Ministeriöiden välinen mentorointiohjelma
 - Työparityöskentely
 - Työryhmätyöskentely
 - Tiedon jakaminen MAHTI:ssa
 - Tiedon julkaisu osaston sivuilla
6. Onko sinua rohkaistu jakamaan tietoa ja miten olet itse pyrkinyt jakamaan sitä?
7. Mikä on sinusta tehokkain tapa jakaa tietoa muiden kanssa?
8. Mitä virallisia tai epävirallisia käytänteitä juuri sinun työyhteisössäsi käytetään tiedon jakamiseen?
9. Kuinka suuri osa työssäsi tarvittavasta tiedosta on mielestäsi hiljaista tietoa?
10. Minkä tiedon koet itse hiljaisena tietona?
11. Miten ministeriö tai osaston käytänteet mahdollistivat tämän tiedon jakamisen jäädessäsi eläkkeelle?
12. Miten omasta mielestäsi hiljaisesta tiedosta saataisiin näkyvämpää? Onko mielestäsi VM:llä käytänteitä tai työkaluja tähän?
13. Olisiko mielestäsi tarpeellista luoda virallisia käytänteitä myös eläkkeelle jääneiden virkamiehien mentorointi- / konsultointitoiminnalle?
14. Oletko mielestäsi ollut työssäsi epäformaalissa mentorointisuhteessa?
15. Jos olet, missä roolissa?
16. Kuuluuko työtapoihisi/osaston työtapoihin valmentaa eli coachata kollegoita? Näetkö oman toimenkuvasi siihen sopivaksi?
17. Miten olisit itse halukas toimimaan mentorointisuhteessa?
18. Oliko/olisiko mielestäsi mentoroinnista apua omassa työssäsi?