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LINKING STRATEGIC HUMAN RESOURCE MANAGEMENT, ORGANIZATIONAL LEARNING AND ORGANIZATIONAL CULTURE WITH KNOWLEDGE MANAGEMENT
An Analysis of Twelve Case Studies

Master's thesis in Public Management

VAASA 2017
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Leaders have lately realized that innovation and competitive edge is easier and cheaper to source within the organization than try to outsource. Knowledge is seen as capital of the organizations and leaders are keen to capitalize it. Many organizations, private as well as public ones has the need to or have tried implement knowledge management practices. Many of them have failed. This thesis looks into knowledge management theory and to the theories of organizational culture, strategic human resource management and organizational learning which all support each other. The aim is to connect the theories on theoretical level as well as empirical level to be able to establish the best practices and learn why some of the organizations struggle to implement knowledge management. In addition, the empirical part is formed from twelve previously made case studies from around the world which prove the connection in the empirical level.

The theoretical framework is based on the theories of knowledge management including the two types of knowledge, tacit and explicit, knowledge transfer and knowledge creation, the theory of organizational learning, learning organization and organizational memory, the theory of strategic human resource management and the activities, and the theory of organizational culture, the types of organizational culture and how type affects on the employees.

The research method is literature review with twelve case studies that are done by researchers in the public and private organizations around the world. The case studies have been sourced from scientific managerial publications through Tritonia network.

The findings were that the previously mentioned methods are in fact connected. Furthermore, the case studies confirm that strategically defined goals and organizational culture are the influential aspects why some organizations succeed and others fail in implementation of knowledge management. Without proper implementation of culture that empowers employees and guarantees openness and motivation by incentives create positive environment for free flow of knowledge. Knowledge can be seen as power especially in public organizations that are hierarchical and bureaucratic. In addition, the strategic human resource management functions and free flow of knowledge are the other key components. Implementation of knowledge management is a process that requires active managers and right type of organizational learning actions. The first step is identification of strategical targets and organizational culture, if the culture as it is does not facilitate the desired outcome it needs to be changed first, change is possible but time consuming. The second step is to support the culture with strategical human resource management activities. Step three is to implement and safe guard knowledge transfer so that it becomes continuous organizational learning, and then the activities are imprinted to organizational memory and are more easily transferred from old to new employees.

**KEYWORDS:** Knowledge Management, Organizational Culture, Organizational Learning, Strategic Human Resource Management
1. INTRODUCTION

1.1. Background

Leaders have recently realized that rather than trying to find competitive edge and resources to innovate from outside they can source the innovation within the organization from the employees already working there and by recruiting the right employees to support this (Ståhle and Grönroos 2000, Calo 2008: 403–416). This realization has led to the development of Knowledge management (KM). Knowledge management caters to the intellectual development of the organization, knowledge sharing, as well as, services the detainment of knowledge when individuals retire or otherwise leaves (Malhotra and Galleta, 2003: 1–10, Von Krogh 2011, Calo 2008: 403–416). Furthermore, the strategically designed KM function leads to innovation and competitive edge which is desired by all organizations (Ståhle and Grönroos 2000, Calo 2008: 403–416).

Knowledge management has been around for decades. Ståhle and Grönroos have stated that:

*Knowledge management, the idea of harnessing, developing and exploiting organizational intellectual capital, is not a new notion. For a long time the terminology was unclear, and even fuzzy. Intellectual capital was often confused with intellectual property, while knowledge management was frequently mistaken for information management. (Ståhle and Grönroos, 2000: 17)*

Intellectual capital is the knowledge that the employees in the organization possess (Ståhle and Grönroos, 2000: 9-10). Intellectual property is what these employees produce, for example, trademarks, documents, music and products; these can be branded and protected by intellectual property laws (Ståhle and Grönroos, 2000: 33). Knowledge management is management of intellectual capital. Information management is the management of information flows in the organization, for example information technology, intranets and manuals (Ståhle and Grönroos, 2000: 40-43).

There are three levels or forms of knowledge form the rawest data to the most refined knowledge.

Data is the rawest form of knowledge; it is easily codified and can be presented in the forms of graphs, numbers, and lists etc. Data can be collected and stored in databases and data warehouses and retrieved when needed (Subashini 2010: 36–39). Information is data that has been interpreted and codified so that it provides knowledge (Ståhle and Grönroos 2000: 31). Information can also be stored in the forms of manuals, examples, and intranets.

Information cannot be directly turned into knowledge; it must be integrated into action (Ståhle and Grönroos 2000: 31). Knowledge is the highest form of information. Knowledge can also be created through experiences and communication. Knowledge is problematic in the sense that employees and organizations do not know what they know, until there is a problem that needs solving (Von Krogh 2011).

Figure 1. Knowledge Hierarchy (Subashini 2010: 36)
Knowledge is divided to two categories tacit and explicit (Osborne 2004: 43–52). Explicit knowledge can be easily transferred because it can be recorded on documents and files. Tacit knowledge, on the other hand, remains in people's heads and unlike explicit knowledge is difficult to transfer or communicate (Subashini 2010: 36–39).

Knowledge transfer and organizational learning are linked in the organizational effort of sharing knowledge, whether tacit or explicit (Osborne 2004: 43–52, Ståhle and Grönroos 2000). However, as noted before, sharing knowledge requires human interaction and willingness of individuals (Ståhle and Grönroos 2000). Furthermore, if the organizational culture is not encouraging knowledge sharing and trust between professionals they are, most likely, unwilling to share their knowledge (Ståhle and Grönroos 2000, Oviedo-Garcia et al. 2014: 74-107).

Strategic human resource management responds to this modern day problem with involving and engaging the employees, giving them independence in decision making and rewarding them accordingly. (Delery and Doty 1996: 802–835, Huselid 1995: 635–672, MacDuffie 1995: 197–221, Razouk et all, 2009: 77–82) Human resource management (HR) is the organ in any organization that is responsible for recruiting, training and maintaining the workforce. The pensioners and other leaving individuals are their "problem" or opportunity, depends how you want to look at it. HR - functions have been modernized, today we talk about strategic human resource management (SHRM) which generally indicates finding the right people, training them with the right information and maintaining the information flow (Edvarsson 2008: 553–561). The difference between the strategic and non-strategic HRM is that in the SHRM the organizations knowledge which resides in employees is seen as an asset that improves the organizational performance. (Miles and Snow, 1984: 36–52, Razouk et al. 2009: 77–82).

The connection between (S)HRM and KM is the human factor. Neither is possible without employees, humans. Humans are difficult to deal with in the organizational point of view, people have feelings, desires, and like indicated before they age and leave the organizations, some people leave even earlier in a pursuit of better career or because
family situations (Calo 2008: 403–416). This is an obvious problem that KM is designed to solve with strategically designed knowledge transfer and continuous organizational learning.

Organizational learning as a function is seen as the pure necessity for any organization that desires to reach competitive edge. (Örtenblad 2002: 213–230, Palos and Stancovici 2016: 2–22) Organizational learning enables flexibility and adaptability leading to innovation. Organizational learning should be seen as continuous flow of knowledge in the organization because only then can the organization take the full advantage of the function (Palos and Stancovici 2015: 2–22). Knowledge management in the form of strategically defined function directs the organization towards learning organization. Knowledge transfer should result in organizational learning. Knowledge transfer trough organizational learning results in knowledge being embedded in organizational memory (Palos and Stancovici 2015: 2–22, Rusaw 2005: 482–500).

Knowledge can be seen as commodity which can earn its owner higher position in the organization - knowledge is power (Syed-Ikhsan and Rowland 2004: 95–111). Implementing organizational culture which fosters knowledge sharing is the key in successful implementation of knowledge management (Mojibi et al. 2013: 281–288).

![Figure 2. Relations of the theory.](image-url)
Properly implemented organizational culture (OC) creates fruitful environment for the three managerial functions: organizational learning, knowledge management, and strategic human resource management, as well as making other strategic changes easier to implement (Park et al. 2004: 106–117). Furthermore, as will discussed later on this paper in relation with the cases, without proper implication of OC it is nearly impossible to get encouraging results on the other three. In their research Park, Ribiere and Schulte (2004: 106–117) found that organizational culture can be a barrier for the successful implementation of knowledge management.

Ideally the organization should have implemented their culture before they try to take on the challenges of KM. Human resource management which functions as a strategically implemented part of organizational culture encourages hiring right employees who possesses mind set for that specific organization (Razouk et al. 2009: 77–82, Tabasi et al. 2014: 170-185). Furthermore, HR-specialists are responsible for arranging schooling for the newcomer as well as all the other employees. They have an important role in controlling the data, information and knowledge that is in the organization (Razouk et al. 2009: 77–82, Tabasi et al. 2014: 170-185, Ståhle and Grönroos, 2000).

Knowledge management should work closely with HR-department to able to support knowledge transfer leading to organizational learning as an ongoing process (Razouk et al. 2009: 77–82, Tabasi et al. 2014: 170-185). While the previously mentioned departments are officially in charge of knowledge transfer, HR professional as well as all managers should encourage informal knowledge transfer which occurs naturally in organizations where trust is present (Ståhle and Grönroos 2000). It can be as simple as colleague asking for help from another colleague or an expert.

As explained the four organizational functions are connected with each other. This paper is proving the connection trough theory as well as case studies.
1.2. Objectives and theoretical framework of the thesis

The research questions on this thesis focuses on the theory of knowledge management, organizational learning, strategic human resource management and organizational culture through articles published in managerial and scientific publications as well as in books. The goal is to indicate how previously mentioned theories can improve and simplify the knowledge related practices in the organization, and in the long run prevent the loss of knowledge with the employees leaving the organization, aide the organization to discover innovation and thus receiving competitive advantage.

The knowledge that has been imprinted in the employees' minds is not easily transferred and that is why it demands effort called organizational learning, this means active knowledge transfer in the organizational perspective at all levels (Razouk et al. 2009: 77–82). These practices fall under the umbrella of knowledge management.

Knowledge management has been concluded to be one of the most applicable theories to source innovation and competitive edge in organizations (Ståhle and Grönroos 2000). Thus, competitive edge is hardly the ambition for public organizations, innovation and the mere notion of better performance, whether in customer service, economically or taking more entrepreneurial aspect are taking the precedence. David E. McNabb (2007) states in the first chapter of his book "Knowledge management in the public sector" that:

*The book is about the use of knowledge management (KM) systems and processes by government organizations to improve the ways they operate and the ways that they deliver public services to citizens. Improving organizational performance includes making it possible for agencies to become more innovative in carrying out their missions, while at the same time becoming more accountable to the public they serve. (McNabb 2007: 3)*

Public organizations have stored already a great amount of data and information; the employees have the means of doing things stored in their heads as knowledge (McNabb 2007). Organization should be using that specific knowledge in training and innovation
purposes. Of course, getting knowledge from employees without the proper implication of knowledge management in the organization can prove to be a challenge for knowledge in the public sector is considered private, a commodity which allows people to succeed in their careers and getting promoted (McNabb 2007). In addition, politics might be an issue as well.

Downsizing in the organizations, public as well as private, has lead in to stage where employees have to manage several positions and roles because the actual workload has not diminished (McNabb 2007). After downsizing procedures managers have to deal with the workload of employees lost, this situation leads them to trying to find replacement which usually means that the remaining workforce have to take additional roles (McNabb 2007). Managers are urging employees to "work smarter, not harder" and "to do more with less", however these wonderful proverbs leads to overly stressed and burnout employees. (Applebaum, Leblanc, and Shapiro 1998: 402–432) In addition, when the workload is too heavy, the trust that is crucial in knowledge transfer can be lost because the employees might feel that they have been unfairly treated (McNabb 2007).

The theory of knowledge management is the basis of this thesis but it cannot be dealt with without the theories of strategic human resource management, organizational culture and organizational learning. One cannot exist without the other.

![Figure 3. Theoretical relations](image-url)
The hypothesis is that the theories of knowledge management, organizational culture, strategic human resource management and organizational learning are connective in the supportive sense. The theory and the case studies will act as guidance.

Research questions is: what needs to be taken into consideration by management in establishing knowledge management to an organization?

Theoretical objectives are:

- To establish and define the theories of knowledge management, organizational culture, organizational learning and strategic human resource management.

- To establish the connection of the theories of knowledge management, organizational culture, organizational learning and strategic human resource management.

Whereas empirical objectives are:

- To review the previously done twelve case studies of knowledge management, organizational culture, organizational learning and strategic human resource management

- Discuss the results

1.3. Research methodology and data

Theoretical chapter of the study is based on books that describe the theoretical base and development of knowledge management, organizational culture, strategic human resource management and organizational learning. In addition the theoretical information
is also acquired from articles. Sourcing material concerning the theory of knowledge management in public administration has proven to be challenging, leading to the need for additional material for theory from the public side too. The articles have been sourced from ProQuest, SAGE journals online and EBSCOhost through Tritonia database search. The articles were searched with multiple keyword searches that were connected to the theoretical framework.

The empirical research is conducted as a literary review based on the previously published research articles where knowledge management and/or organizational learning has been applied or researched. The articles have been sourced from the same resources as the articles for the theoretical framework. The findings from the articles are reviewed and discussed. Because of the lack of this kind of research done in public sector some of the research is also concerning public sector.
2. KNOWLEDGE MANAGEMENT

Knowledge management KM is not a new theory, there are several different theories that include KM and KM includes several theories from psychology, technology to the art and science of management in addition with philosophy, economics and organizational theory (McNabb 2007: xii). It is commonly confused with information management. The difference is in focus, KM focuses on knowledge people obtain and the distribution of knowledge, information management focuses on information technology IT (Ståhle & Grönroos 2000).

KM began developing with the industrial revolution; employees did not have to do all the physical work when machines came in use, so they developed to be knowledge workers. By the year 2000 forty percent of all workforces were knowledge workers (Ståhle & Grönroos 2000). In addition, the industrial revolution reduced the cost of information, so that it was available for the common people, today information intensive society cost of information is practically none existent (Ståhle & Grönroos 2000).

There are several definitions of knowledge management:

"The deployment of a comprehensive system that enhances growth of an organization's knowledge." (Salisbury 2003: 128)

"Knowledge management caters to the critical issues of organizational adaptation, survival, and competence in face of increasingly discontinuous environmental change ... Essentially; it embodies organizational processes that seek synergistic combination of data and information processing capacity of information technologies, and the creative and innovative capacity of human beings." (Malhotra and Galleta, 2003: 1–10)

"Knowledge management is the process of capturing, distributing, and effectively using knowledge." (Davenport, 1994: 119)

"A fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, process, practices, and norms (Davenport and Prusak 2000)."
Knowledge management involves activities related to the capture, use and sharing of knowledge by the organization. It involves the management both of external linkages and of knowledge flows within the enterprise, including methods and procedures for seeking external knowledge and for establishing closer relationships with other enterprises (suppliers, competitors), customers or research institutions. In addition to practices for gaining new knowledge, knowledge management involves methods for sharing and using knowledge, including establishing value systems for sharing knowledge and practices for codifying routines (OECD Glossary of Statistical Terms, http://stats.oecd.org/glossary/detail.asp?ID=6878).

Knowledge management is the planning, organizing, motivating, and controlling of people, processes and systems in the organization to ensure that its knowledge-related assets are improved and effectively employed (King 2009: 4).

Knowledge management is a multi-disciplinary approach to using and managing organizational knowledge that is based on sound information management practices focused on organizational learning, recognizing the contribution and value of employees, and is enabled by technology. It is primarily concerned with the content of knowledge within the organization and how that knowledge can improve organizational performance (Osborne 2004: 44).

The issue with KM for modern management is that it is hard to categorize and measure. Organizations confuse it with information management which is visible in the focus on tangible information tools like computers and intranets, rather than focusing human resource management HRM, more specifically strategic human resource management SHRM. Like mentioned one of the greatest challenges is measurability, in today's organizations where it is important to deliver to stakeholders, whether they are stock owners or tax payers, everything can be looked in the light of key figures, KM cannot be measured by numbers directly. (Stähle and Grönroos 2000)

Evidence shows that proper implementation of KM has great effect on innovation, entrepreneurial orientation and competitive edge, but measuring these indicators directly by numbers in short term is impossible (Stähle and Grönroos 2000). The long term results should show changes in the organizational culture because employees are learning to share information rather than withhold it, changes in the productivity levels should be
also visible, in addition the co-operation in projects should be smoother and faster
(Ståhle and Grönroos 2000).

The other great challenge is to change the organizational environment so that there is a
free flow of information sharing amongst the employees so that when they have been
learning new skills or new employees come in with new skill set they are able to com-
bine their knowledge in to one working organism. (Ståhle & Grönroos 2000: 25–29)

Third challenge the role of managers in KM, they can either hinder employees' progress
or encourage it. Ståhle and Grönroos (2000: 276–288) discuss the role of management
for many pages in their book because of the fact that was previously stated. The prob-
lem in their opinion is that managers are so used to managing that they forget that issues
could be handled differently. They also implicate that strong-minded leaders make the
organization weak and to lose its ability to continuous development (Ståhle and Grön-

There are two schools of KM; Scandinavian school which focuses on recognizing the
knowledge that employees has as the intellectual capital. The focus is on knowledge
management where the emphasis is on employees as the asset of the organization. The
other school is American tradition where the focus is on information technology IT,
hence information management (Figure 4) (Ståhle and Grönroos 2000: 17). Both forms
are needed because the reason for our knowledge society is the knowledge sharing, stor-
ing and knowledge accessibility is due to IT. However, computers cannot have the ex-
periences or the ability to communicate them on humane level.
Table 1 Schools of Knowledge Management (Ståhle and Grönroos 2000: 17)

<table>
<thead>
<tr>
<th>School of Knowledge management</th>
<th>Focus</th>
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</thead>
<tbody>
<tr>
<td>Scandinavian School of Knowledge Management</td>
<td>Intellectual Capital</td>
<td>Knowledge Management</td>
<td>Human</td>
</tr>
<tr>
<td>American Tradition</td>
<td>Intellectual Property</td>
<td>Information Management</td>
<td>Information technology</td>
</tr>
</tbody>
</table>

In this research the focus is on Scandinavian School and the human aspect of the theory.

2.1. Intellectual capital

Intellectual capital has been conceptualized already in the 1990s when two Swedish men Leif Edvinsson and Karl Erik Sveiby started developing it leading in what is now known as the Scandinavian School of Intellectual Capital (Ståhle & Grönroos 2000: 47–53). Edvinsson had just been appointed as Director of Intellectual Capital of Skandia. Sveiby had been was an published author of book about knowledge organizations 1986. Edvinsson learned about Sveibys efforts in the same field and hired him as management advisor (Ståhle & Grönroos 2000: 47–53). Together they wanted to research what where the factors behind the value of the company and rather than just looking into the fiscal reports they wanted to go deeper. They wanted to find a definition of intellectual capital. (Ståhle & Grönroos 2000: 47–53)

......To begin with, they started to study the organization as a true living organism, in this a case a tree. Edvinsson and Sveiby report: "what is described in organization charts, annual reports and company brochures represents the trunk, branches and leaves. But to assume that this is all is a mistake” they stressed "half or more of the mass of a tree is underground in the root system. And whereas the flavor of the fruit or the color of the leaves provide evidence as to how healthy the tree is at the moment , understanding what is going on in the roots is far more effective way to understand how healthy that tree will be years to come.” (Ståhle and Grönroos 2000: 49)
Intellectual capital is defined as the roots of the company, which means that there is more to company's value that the eye can see, referring to the underlying value which thrives the company forward rather than just quarterly reports. (Ståhle and Grönroos 2000: 50)

Research done by Skandia divides the value into two capital categories:

1. **Human Capital**
   
   *For example the combined knowledge, skill, inventiveness and ability of the company's individual employees to meet the task at hand. This also includes the company's values, culture and philosophy.* (Ståhle and Grönroos 2000: 50)

   *These are real intangibles in the sense that human capital cannot be owned by the company.* (Ståhle and Grönroos 2000: 50)

2. **Structural Capital**

   *For example the hardware, software, databases, organizational structure and intellectual property rights.* (Ståhle and Grönroos 2000: 50)

   *These are the results of employee creativity and productivity, and they can be owned and traded.* (Ståhle and Grönroos 2000: 50)

2.2. **Explicit and tacit knowledge**

Knowledge is by tradition divided into two categories; tacit and explicit knowledge, Polyani made the notion of this differentiation already in 1957 (Osborne 2004: 44). The separation of the two is how the knowledge has been obtained, how it is shared, can it be re-produced and storage easily and can it be presented. It has been calculated that explicit knowledge is just the tip of the knowledge iceberg and tacit knowledge is all that is under the water, in addition when calculating value difference, explicit
knowledge corresponds with 10% and tacit knowledge 10% of the value in organizations (Ståhle & Grönroos 2000: 32, Osborne 2004: 44).

![Diagram of explicit and tacit knowledge]

**Figure 4.** Tip of the iceberg (Ståhle and Grönroos 2000: 32, Osborne 2004: 44)

The differentiation between these two types can also be called formalized knowledge - explicit knowledge and non-formalized tacit knowledge (Osborne 2004: 46). These definitions make it easier to comprehend the meaning behind the terms furthermore, it defines also the means of knowledge sharing.

2.2.1 Explicit knowledge

Explicit or formalized knowledge is easily shared; it is precise, theoretical, and informative in non-creative way. It includes theories, instructions, information (Joia and Lemos 2010: 410–427). Explicit knowledge is widely available in the organization in the form of intranet, manuals, handbooks, instructions and leaflets. The flow of this type of information is usually top down or otherwise from specified sources (Ståhle and Grönroos 2000: 17–47). There is no argument that this type of information is needed especially in large governmental organizations, because there is an expectation that those organizations will function similarly non-dependent of the geographical location, or in that matter
any given country. Information has to easily reached and understood to employees to be able to produce action based on it.

2.2.2 Tacit knowledge

Tacit or sometimes also called implicit or non-formalized knowledge in comparison is individually learned, experienced and used; it might be even something the individual does not even know that she knows. It is difficult to transfer and may even be challenged if it even should be transferred (Ståhle and Grönroos 2000). Usually it refers to know-how, for example problem-solving, all individuals have experience based tactic in it (Joia and Lemos 2010: 410–427). Tacit knowledge transfer has to be done by communicating and letting other experience, this requires comprehension and concentrations skills from the receiver, in addition with motivation (Joia and Lemos 2010: 410–427)

Tacit knowledge has great value in the organization because it leads to innovation, for employees are able to develop and make suggestions of their tasks. (Subashini 2010: 36–39) This is why it is easy to understand why the loss of tacit knowledge with experienced employees is expensive to organizations; the only way to prevent the loss of desired knowledge is to transfer it before the employees leave. (Osborne 2004: 44)

Tacit knowledge is used in organizations to gain competitive advantage through innovation. (Subashini 2010: 36-39) Furthermore, tacit knowledge can be obtained both in the organization and outside. Subashini (2010) explains:

Inside: By deciding what existing tacit knowledge capabilities the members in the organization carry themselves and what improvement could be made to build up the accumulated learning of the individuals and therefore, enhance the tacit know-how competence. (Subashini 2010: 37)

Outside: By trying to gain tacit knowledge and skills from other firms, through recruiting the right individuals with the requisite education or work experience, or by acquiring parts of or whole new companies or by engaging appropriate consultants or by building networks with other companies. It is made clear that tacit knowledge is gained and vitalized throughout all functions and stages of a company's operations. (Subashini 2010: 37)
The organization is responsible for creating an environment where the tacit knowledge that individuals possess can be shared and developed further.

The figure 5 exhibits the settings where knowledge is exchanged in individual and group levels. Socialization, externalization, internalization, and combination are the SECI - model which will be explained in detail in the next chapter when the knowledge transfer is discussed.

**Figure 5.** Nonaka's Framework for knowledge-creation mechanisms (Anand, Ward and Tatikonda 2010: 304)
2.3. Knowledge transfer

Knowledge management aims to increase knowledge sharing whether formal or informal. It encourages individuals to share what they know for the organization to be able to gain on this flow (Willem and Buelens 2007: 581–606). Transfer of explicit knowledge can be done as mentioned earlier with the aid of IT, pamphlets, manuals and other forms of recording devises (Ståhle and Grönroos 2000, Osborne 2004 43–52). In addition, knowledge can be shared between individual employees for example master-apprentice-relationship or mentoring, brainstorming, from one employee to groups, from groups to groups, training, however this requires interaction, socialization and conversations (Greene 2015: 15–16). Knowledge sharing does not only mean one party giving out information but also the other party processing it and making it as its own (Willem and Buelens 2007: 581–606). Furthermore, as intangible asset knowledge is not lost from the person sharing it. (Syed-Ikhsan and Rowland 2004: 95–111) Development of knowledge is inevitable because it is again processed by human beings whom are able to evaluate it accordingly and add to it with their own knowledge spectrum. Knowledge can also be lost if the respondent does not evaluate it to be important (Ståhle and Grönroos 2000).

Wei’e (2011: 1–4) has differentiated two activities, transmission and absorption which forms the action on knowledge transfer. These two initiates further four stages:

1. **Knowledge sender who initiates the procedure of knowledge transfer**
2. **Receiver who accepts the transmitted knowledge**
3. **The knowledge that is the object handled**
4. **Media and ways by which knowledge flow and transfer are implemented.** (Wei’e 2011: 1)

Furthermore, there are also external environment:

*External environment exerts influences on knowledge transfer too, such as physical, cultural, institutional and technological environment factors.* (Wei’e 2011: 1)
Wei'e (2011: 2) defines the roles of knowledge sender and receiver:

- **Knowledge sender**: the source and initiator of knowledge transfer, determining the result and effect of knowledge transfer from three aspects:

  1. **Subjective inclination to transfer knowledge to others.** Possession of unique and particular knowledge or professional skills helps to win some right and power, and hold competitive advantages in an organization or society. Considering potential loss of own unique position due to transfer of the knowledge, individuals tend to show negative even opponent attitude to knowledge transfer.

  2. **Perception of his/her own knowledge.** A lot of knowledge is implicit and easily to be ignored and overlooked under inertia thinking mode, so its owner seldom explicate and preach the knowledge positively.

  3. **Capability of knowledge-transmitting.** Usually, knowledge sender has to organize, code, express and transmit the relative knowledge in different ways varying with its concrete content and peculiar characteristic.

    In a word, subjective inclination to transfer knowledge, perception of own knowledge, capability of knowledge-transmitting determine the ability of knowledge sender to transfer the knowledge, and influence the effect of knowledge transfer to a great extent. (Wei'e 2011: 2)

- **Knowledge receiver**: is the sink and end of knowledge transfer, whose acceptance desire for new knowledge and existent knowledge base affect the result of understanding and absorption of the received knowledge. The weaker the desire is, the lower the enthusiasm of learning the new knowledge is. The existent knowledge helps not only to memorize new knowledge, but also to utilize the new knowledge. The more the existent knowledge is, the easier the master of new knowledge. Therefore, acceptance desire for new knowledge and level of existent knowledge imply the ability to absorb the transmitted knowledge to some extent. (Wei'e 2011: 2)
Knowledge transfer is necessary in an organization even without proper implementation of KM; however the aim of the action differs. Without KM, the information provided is there to give employees guidelines and support so that they are able to perform in their daily tasks, it is normal that in these organizations the knowledge is kept with managers and provided top down (Ståhle and Grönroos: 2000). These organizations tend to hinder knowledge sharing between the employees leading to hindering also the entrepreneur-like attitudes and ownership of one's position. In these organizations knowledge is often considered a commodity that may be used to better one's own future rather than to provide for the organizations as a whole (Sayed-Ikhsan and Rowland 2004: 95–111, Stähle and Grönroos 2000).

Two theories of knowledge transfer have been established:
• **Codification:** Provides high-quality, reliable and fast information systems implementation by re-using codified knowledge. (Hansen et al. 1999: 106–116)

In codification, all knowledge is standardized, structured and stored in information systems. In these systems, knowledge can be accessed via an efficient indexation system and can be distributed to all branch offices of the company via data networks. Thus, the reutilization of explicit knowledge is the main objective of the company, giving scant incentive to customization to adapt products and services to specific client needs (Hansen et al. 1999: 106–116).

• **Personalization:** Provides creative analytically rigorous advice on high-level strategic problems by channeling individual expertise. (Hansen et al. 1999: 106–116)

The emphasis is on tacit knowledge transfer from one person to another. In this case, the knowledge storage systems are less robust than in the earlier strategy. The tools used are those that prioritize personal contact, so that difficulties, solutions, methods, costs etc. of tasks carried out for the first time can be discussed to help employees who will be called upon to perform similar tasks later (Hansen et al. 1999: 106–116).

In addition, Leroy and Ramanantsoa (1997: 871–894) connects knowledge transfer with learning defining the outlines similarly with codification and personalization:

• **Cognitive learning:** relates to competences centered on knowledge whose contents articulated and characterized by a knowledge clarification and formalization. (Leroy and Ramanantsoa 1997: 871–894)

• **Behavioral learning:** appears when knowledge is not articulated but can however be taught, in a less direct and less explicit way. This learning, directed towards the how, aims at the procedural knowledge turned towards the concrete action which is difficult to be articulated with for example the routines, with know-how and interpersonal skills. Training is carried out through a repeated practice (routines) or the imitation of the expert by the young worker which allows him to accumulate experience. (Leroy and Ramanantsoa 1997: 871–894)

All knowledge transfer requires learning from the recipient. The difference is that codified or cognitive knowledge can be recapped quite easily because the source is, like indicated, codified and stored in databases or written form (Subashini 2010: 36–39).
However, recapping the personalized or behavioral learning is more difficult because of the human factor.

Joia and Lemos (2010: 410–427) have listed factors that affect on tacit knowledge transfer:

- Individual management of time
- Common language
- Mutual trust
- Relationship network
- Hierarchy
- Reward
- Type of training
- Knowledge transference
- Knowledge storage
- Power
- Internal level of questioning
- Type of valued knowledge
- Media

Tacit knowledge, as being earlier indicated, relies heavily on individual experience and communicating it might be challenging without the right audience and motivation from them (Von Krogh 2011: 403–426). Choosing also the right methodology and timing is important; however no transferring will happen without trust. Von Krogh (2011: 403–426) points out that if the transmitter or knowledge sharer feels that the audience will unfairly gain from the knowledge given she might be unwilling to share knowledge (Sayed-Ikhsan and Rowland 2004: 95–111). This makes knowledge sharing practices vulnerable if not properly supported and rewarded (Sayed-Ikhsan and Rowland 2004: 95–111).

Since organizations nowadays can be based in several countries around the world the importance of modern technology has gained importance. Conferences and meetings
can be held via video calls which allows tacit knowledge to be transferred further (Subashini 2010: 36-39). In addition, organizations have established discussion forums and connect on professional social media like LinkedIn. Furthermore, these tools provide also for personal social networking.

The organization is responsible, through KM and SHRM, to provide a platform, an environment, that nurtures trust, knowledge sharing, communication, commitment and is socially stimulating (Edvardsson 2007: 553–561).

2.4. Knowledge creation

Nonaka et al. (2000) define the process of knowledge creation:

Knowledge creation is a continuous, self-transcending process through which one transcends the boundary of the old self into a new self by acquiring a new context, a new view of the world, and new knowledge. In short, it is a journey from being to becoming. One also transcends the boundary between self and other, as knowledge is created through the interactions amongst individuals or between individuals and their environment. In knowledge creation, micro and macro interact with each other, and changes occur at both the micro and the macro level: an individual (micro) influences and is influenced by the environment (macro) with which he or she interacts. (Nonaka et al. 2000: 8)

Nonaka et al. (2000: 8) have identified three (3) processes of knowledge creation:

To understand how organizations create knowledge dynamically, we propose a model of knowledge creation consisting of three elements:

(i) The SECI process, the process of knowledge creation through conversion between tacit and explicit knowledge;
(ii) Ba, the shared context for knowledge creation; and
(iii) Knowledge assets - the inputs, outputs, and moderator of the knowledge-creating process.

The three elements of knowledge creation have to interact with each other to form the knowledge spiral that creates knowledge. (Nonaka et al. 2000: 8)
2.4.1 The SECI - model and process

Nonaka and Konno (1998: 40-55) have described four processes in which new knowledge is created by conversion between tacit and explicit knowledge, they called it the SECI - model according to the four processes - socialization, externalization, combination and internalization. Later on two more elements were added by Nonaka et al. (2000: 5–34), first of the two is ba, which stand for the shared context of knowledge creation and second knowledge assets, meaning the inputs, outputs, and moderator of the knowledge creating process (Nonaka et al. 2000: 5–34).

1. Socialization

Employees, customers and suppliers communicating their experiences, including mental models, world views and expressing trust. (Nonaka and Konno, 1998: 40–55)

2. Externalization

Describes the change from tacit knowledge held by specialists to explicit knowledge in codified form so that it can be shared to others, to form a basis for new knowledge. (Nonaka and Konno, 1998: 40–55 Nonaka et al. 2000 5–34)
3. Combination
Changing the existing explicit knowledge to other form that can be storage and shared through databases and other computerized means. (Nonaka and Konno, 1998: 40–55 Nonaka et al., 2000: 5–34)

4. Internalization
Describes the change from explicit knowledge through understanding and interpretation to tacit knowledge. (Nonaka et al., 2000: 5–34)

Leaders need to recognize that knowledge creation does not only happen within the organization on micro level but also in the macro level outside the organization. There are stakeholders like suppliers, customers and contractors that can also deliver knowledge creation advantages (Nonaka et al. 2000: 5–34). In fact, an organization to be truly in-
novative and to able achieve competitive advantage the outsourced knowledge is valuable (Nonaka et al. 2000: 5–34). Strategic human resource management can supply to this need with headhunting and strategic hiring. In addition, there is a possibility for projects with universities or other outsourced expert organizations (Nonaka et al. 2000: 5–34).

Above mentioned stakeholders deliver both tacit and explicit knowledge which is communicated through dialogue to come to mutual understanding. (Nonaka et al. 2000: 5–34)

Figure 7 shows the exchange of explicit and tacit knowledge between the organization (company) and the stakeholders (customer/supplier) (Nonaka et al. 2000: 5–34). Mutual trust and understanding forms the basis also in this relationship. Modern selling is based on long term relationships rather than quick fixes (Nonaka et al. 2000: 5–34). In the modern markets relationships are more meaningful because it is the one possibility to differentiate from competitors. Relationships are also fragile and highly dependent on personal chemistry between the actors (Nonaka et al. 2000: 5–34).

Customers provide the information of the need that they have by presenting explicit knowledge in the forms of blue prints, calculations or other means, as well as with tacit knowledge of their needs, experiences and know-how (Nonaka et al. 2000: 5–34). The organization responds accordingly by representing codified knowledge in similar form in presentation or blueprints of their product or service. The continues dialogue is important, because it allows to the partners to present their expectations, interests, and motivation (Nonaka et al. 2000: 5–34).
"Ba" is the fifth element of the SECI - model. It has been noted in the literature from philosophers like Plato, Kant, Husserl and Whitehead as well as the Japanese philosopher Nishida in the 1920s. (Nonaka et al. 2000 5–34). The definitions by Nonaka et al. (2000: 5–34) and Nonaka and Konno (1998: 40–55) are:

"Shared context in which knowledge is shared, created and utilized." (Nonaka et al. 2000: 5–34).

"Knowledge creation, generation and regeneration as it provide the energy, quality, and place to perform the individual conversions and to move along the knowledge spiral." (Nonaka and Konno 1998: 40–55)

However, Nonaka et al. (2000: 5–34) reminds that ba is not a physical place but a time and space. Ba is divided in to two dimensions according to the type of interaction: individual versus collective and face-to-face versus virtual media (including books, manu-
als, emails etc.) (Nonaka et al. 2000: 5–34). Furthermore, the two dimensions are divided into four subtypes according to the dimensions of interactions:

1. Originating ba
   Place which offers the platform for socialization in face-to-face contact, for individuals to share their experiences, feelings, emotions and mental models - tacit knowledge. This where the basis of knowledge sharing is created by showing commitment, caring and trusting others. (Nonaka et al. 2000: 5–34)

2. Dialoguing ba
   Place where collective face-to-face interactions are carried through by sharing mental models and skills and transforming them into common terms and concepts. (Nonaka et al. 2000: 5–34)

3. Systemizing ba
   Place where explicit knowledge is changed into format where it can be easily shared through technological advances or written manuals. (Nonaka et al. 2000: 5–34)

4. Exercising ba
   Place where individuals receive and internalize explicit knowledge shared through manuals or databases. Provides a context for internationalization. (Nonaka et al. 2000: 5–34)

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**Figure 10.** Model of Ba and types of interaction (Nonaka et al. 2000: 5–34)
Figure 8 indicates how the four types of ba correspond with the types of interaction as well as the media. The basis for all face-to-face interaction where people reveal their experiences and knowledge is trusting environment. (Nonaka et al. 2000: 5–34) The example of originating ba could be mentoring, example of dialoguing ba could different in-house courses and schooling, example of systemizing ba could be when senior employee or an course leader is writing material or making manuals. Example of exercising ba is when employee reads the notes, manuals or intranet and makes the information as the part of their actions. (Nonaka et al. 2000: 5–34)

2.4.3 Competing value framework in knowledge transfer


The two dimensions are divided in to four parts, each identifying factors of organizational and individual in type, directing the tasks in organization (Quinn and Rohrbaugh 1983: 363–377). The four parts differentiate from each other by representing the opposites. The four are called:

1. Human relations model
2. Open system model
3. Rational goal model
4. Internal process model (Quinn and Rohrbaugh, 1983: 363–377)

These four parts connect to the types of organizational cultures described more closely in chapter 3, which is about the organizational culture.
3. ORGANIZATIONAL CULTURE

Organizational culture (OC) can be defined as shared beliefs, norms, symbols and values within the organization. Organizational culture defines how the employees behave in certain situations (O'Reilly et al. 1991: 487–516). The basis of the theory of OC is based on theories of anthropology, psychology and sociology (O'Reilly et al. 1991: 487–516, Rajnish 2011: 779-801).

In recruiting situations organizations try to identify the applicants that share their norms of culture. Unless, the organization desires to change the existing culture. Managerial positions are usually where the change of culture is started. Furthermore, strategic human resource management (SHRM) is used as medium in the process because the reason for change is most commonly strategically aimed. (Pourkiani et al. 2011: 416–421)

Quinn and Rohrbaum (1983: 363–377) and Cameron and Quinn (1999: 23-59) have used the two dimensions of the "competing values framework". CVF was initially designed for determine factors for organizational effectiveness, as the basis of identification of organizational culture types. One emphasizes the flexibility, discretion, and dynamism from an emphasis on stability, order, and control, and the other differentiates the internal orientation with a focus on integration, collaboration, and unity from an external orientation with a focus on differentiation, competition, and rivalry (Quinn and Rohrbaum, 1983: 363–377, Cameron and Quinn 1999: 25–59).

The two dimensions have been divided in to four quadrants that indicate the four different organizational and individual factors, translating in to actions in environmental management and internal integration (Quinn and Rohrbaum, 1983: 363–377, Cameron and Quinn 1999: 25–59).

The third dimension identified by Quinn and Rohrbaum (1983: 363–377, Cameron and Quinn 1999: 25–59) is the means and ends, which emphasizes the processes versus measurable outcomes.
1. Human relations model (internal, flexible)
   - Means: cohesion, morale
   - Ends: human resource development
2. Open system model (external, flexible)
   - Means: flexibility, readiness
   - Ends: growth, resource acquisition
3. Rational goal model (external, controlled)
   - Means: planning, goal setting
   - Ends: productivity, efficiency
4. Internal process model (internal, controlled)
   - Means: information management, communication

These four models correspond with the four culture types accordingly.

<table>
<thead>
<tr>
<th>Human relations model</th>
<th>Open system model</th>
</tr>
</thead>
<tbody>
<tr>
<td>The clan culture</td>
<td>The adhocracy culture</td>
</tr>
<tr>
<td>Internal process model</td>
<td>Rational goal model</td>
</tr>
<tr>
<td>The hierarchy culture</td>
<td>The market culture</td>
</tr>
</tbody>
</table>

**Table 2.** The types of organizational culture connected with the competing value framework (Quinn and Rohrbaugh 1983: 363–377, Cameron and Quinn, 2006: 37–45)

The organizational culture assessment tool instrument (OCAI) helps to identify the organizational culture types (Cameron and Quinn, 2006: 33–54) that are:

1. **Clan culture:** Which focuses on the dissemination aspects of knowledge, enabling teamwork and implication; the liaison on the organizational level is repre-
sented by loyalty and tradition, and success is defined in terms of internal climate and carrying for people. Employees are bonded together as a clan with the sense of belonging which is based on togetherness and long history (Cameron and Quinn, 2006: 33–54).

2. Adhocracy culture: Which stimulates creativity and entrepreneurial spirit; visionary, innovative and risk-oriented leadership; employees are dedicated to experimentation and innovation, and preparation for change and new challenges is essential. Employees bond through motivation, enthusiasm and being challenged. This type of culture emerges as it is needed and disappears when the task at hand is completed (Cameron and Quinn, 2006: 33–54).

3. Hierarchy culture: In which norm observation, routine, maintaining stability and internal control and long-term objectives being focusing on stability, predictability and efficiency are all important. Employees are bonded through shared rules, guidelines and procedures (Cameron and Quinn, 2006: 33–54).

4. Marketing culture: Focused more toward the external environment, valuing competition, productivity or efficiency; the liaison that keeps the organization united is an emphasis on winning, and the long-term focus is on competitive actions and achieving stretch goals and targets. Employees bond through orientation towards shared goals and competition. The organizational aim is to receive market benefits in the form of profits. (Cameron and Quinn, 2006: 33–54, Wiewiora et al. 2013: 1163–1174)

Organizations rarely represent just one type of culture (Cameron and Quinn, 2006: 33–54, Wiewiora et al. 2013: 1163–1174). However, if the existing culture needs a change then it needs to be first identified and then the change implemented. Furthermore, according to Yu and Wu (2009: 37–42) represent the idea that organization should be able to perform and balance all four areas to be successful. Leaders that are able to adjust their actions in often contradicting
demands by adjusting the culture are able to navigate through the demands of the markets and other challenges thrown at them (Wu and Yu, 2009: 37–42).

Figure 11. The competing values framework (Cameron and Quinn, 2006: 52)

The competing values framework that was presented in chapter 2 identifies the types of organizational culture. However, there are theories that suggest that there are more dimensions to be added like the ethical and trusting culture (Brown and Woodland, 1999: 175–199). Trust is essential for organizations that expect its employees to share knowledge. Furthermore, Brown and Woodland (1999: 175–199) tells us that:

*Members of an organization, who have the fear of unjust or disrespectful treatment, or who do not have other means of power and authority, often use knowledge as a control and defense mechanism to maintain their relevance and importance in the organization. Thus, climate of mutual trust, compassion and concern for others in an organization is essential prerequisite for sharing knowledge. (Brown and Woodland, 1999: 175–199)*
Rajnish (2011: 779–801) sums up the completing value framework and knowledge creation including the four types of organizational culture described in the text earlier as well as ba.

The competing values framework of Quinn and Rohrbaugh (1983: 363–377) was developed to measure the organizational effectiveness. However, organizational culture is connected to organizational effectiveness as well as all the other theories in this thesis. Knowledge management as well as strategic human resource management has same strategic goals of effective organization. Furthermore, the four models are directly connected to the four types of organizational cultures (Rajnish 2011: 779–801). Table 3 on the next page shows the conclusion of the organizational culture theory, together with ba.
### Table 3. The organizational knowledge management framework (Rajnish, 2011:779–801)

<table>
<thead>
<tr>
<th>Competing Value framework</th>
<th>Knowledge creation and conversion framework</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Culture</strong></td>
<td><strong>Mode</strong></td>
</tr>
<tr>
<td><strong>Clan culture</strong></td>
<td>Socialization</td>
</tr>
<tr>
<td>✓ Information sharing</td>
<td>Individuals share experiences with each other, which also includes ✓ Creation and sharing of mental models, ✓ World views, and ✓ Mutual trust</td>
</tr>
<tr>
<td>✓ Teamwork</td>
<td></td>
</tr>
<tr>
<td>✓ Collaboration</td>
<td></td>
</tr>
<tr>
<td>✓ Talent management (SHRM)</td>
<td></td>
</tr>
<tr>
<td>✓ Empowerment, interpersonal relationships, and ✓ Participative decision making</td>
<td></td>
</tr>
<tr>
<td><strong>Adhocra culture</strong></td>
<td>Externalization</td>
</tr>
<tr>
<td>✓ Innovation</td>
<td>Conversion of tacitly held knowledge, such as ✓ Specialized knowledge held by customers or specialists, into an explicit, readily understandable form ✓ Basis for creation of new knowledge</td>
</tr>
<tr>
<td>✓ Creativity</td>
<td></td>
</tr>
<tr>
<td>✓ Articulating future vision, ✓ Adaptation ✓ Transformation change ✓ Growth, entrepreneurship ✓ External support, and ✓ Resource acquisition</td>
<td></td>
</tr>
<tr>
<td><strong>Market culture</strong></td>
<td>Combination</td>
</tr>
<tr>
<td>✓ Competitiveness</td>
<td>Existing explicit knowledge is articulated, shared, and reconfigured into more complex and systematic sets of explicit knowledge ✓ Databases, ✓ Computerized networks ✓ Documents, ✓ Manuals</td>
</tr>
<tr>
<td>✓ Fast response</td>
<td></td>
</tr>
<tr>
<td>✓ Decisioniveness</td>
<td></td>
</tr>
<tr>
<td>✓ Productivity</td>
<td></td>
</tr>
<tr>
<td>✓ Goal clarity</td>
<td></td>
</tr>
<tr>
<td>✓ Driving through barriers ✓ Efficiency, and ✓ Goal achievement</td>
<td></td>
</tr>
<tr>
<td><strong>Hierarchical culture</strong></td>
<td>Internalization</td>
</tr>
<tr>
<td>✓ Routine &amp; predictable work processes ✓ Structuring ✓ Documentation ✓ Assessment &amp; measurement ✓ Centralization ✓ Controlling processes ✓ Stability and Efficiency improvement</td>
<td>Explicit knowledge is embodied and internalized through knowledge interpretation and is converted into tacit knowledge ✓ Exists in the form of shared mental models or ✓ Technical know-how</td>
</tr>
</tbody>
</table>
3.1 The Denison organizational culture model

The Denison organizational culture model concentrates on four traits of organizational cultures: involvement, consistency, adaptability, and mission (Denison and Mishra 1995: 204–223). Involvement and adaptability illustrates the flexibility, openness and responsiveness, with a strong sense of organizational growth (Denison and Mishra 1995: 204–223). On the other hand, consistency and mission illustrates profitability through integration, direction, and vision (Denison and Mishra 1995: 204–223). In addition, all four parts of the model predicts effectiveness through quality, employee satisfaction, and general performance. Furthermore, the four traits predict return-on-assets and growth of sales, however only for larger organizations (Denison and Mishra 1995: 204–223).

Table 4. Theoretical model of culture traits (Denison and Mishra, 1995: 204–223)

<table>
<thead>
<tr>
<th>External Orientation</th>
<th>Adaptability</th>
<th>Mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Integration</td>
<td>Involvement</td>
<td>Consistency</td>
</tr>
<tr>
<td>Change And Flexibility</td>
<td>Stability And Direction</td>
<td></td>
</tr>
</tbody>
</table>

Mojibi, Hosseinzadeh and Khojasteh (2015: 281–288) have summarized the four traits as follows:

Involvement: *Effective organizations empower their people, build their organizations around teams, and develop human capability at all levels. Executives,*
managers, and employees are committed to their work and feel that they own a piece of the organization. People at all levels feel that they have at least some input into decisions that will affect their work and that their work is directly connected to the goals of the organization. (Mojibi et al. 2015: 284)

Consistency: Organizations also tend to be effective because they have strong cultures that are highly consistent, well-coordinated, and well-integrated. Behavior is rooted in a set of core values, and leaders and followers are skilled at reaching agreement even when there are diverse points of view. This type of consistency is a powerful source of stability and internal integration that results from a common mindset and a high degree of conformity. (Mojibi et al. 2015: 284)

Adaptability: Ironically, organizations that are well integrated are often the most difficult ones to change. Adaptable organizations are driven by their customers, take risks and learn from their mistakes, and have the capability and experience at creating change. They are continuously changing the system so that they improve the organizations' collective abilities to provide value for their customers. (Mojibi et al. 2015: 284)

Mission: Successful organizations have a clear sense of purpose and direction that defines organizational goals and strategic objectives, and expresses a vision of how the organization will look in the future. When an organization's underlying mission changes, changes also occur in other aspects of the organization's culture. (Mojibi et al. 2015: 284)

Figure 12. Connection between OC traits and KM (Mojibi et al. 2015: 284)
The Denison model of organizational traits indicates that organizations with empowered and involved employees that are rooted in the organization, knowledgeable about the organizational goals and vision, adapt to change to improve the organizations performance in the benefit of customers and stakeholders, and sets their sights on the future success results in organizational successful, cost-efficiency, customer orientation and loyal employees (Mojibi 2015: 281–288).

Successful organizations with committed, empowered and, involved employees have the greater basis for implementation of KM and knowledge sharing in general. Furthermore, it enables the organizational learning as the desire to share knowledge is supported with mutual success and reward. Next chapter discusses organizational learning, learning organization and organizational memory.
4. ORGANIZATIONAL LEARNING

Researchers agree that organizational learning is a must for any firm that is trying to compete in the modern markets (Örtenblad 2002: 213–230, Palos and Stancovici 2015: 2–22). The learning capacity in any organization defines the adaptability, flexibility, innovation, and the ability to reinvent them if needed. However, there have not been enough empirical studies for actual planned organizational learning to able to define the best practices or a blueprint (Palos & Stancovici 2015: 2–22).

Implementation and carrying out the learning in practice seems to present the greatest challenge (Thomsen & Hoest 2001: 469–491). Garvin (1993: 78–91) insists that organizations should control the processes of learning rather than letting it happen by change. It is obvious that learning occurs whether planned or not, however, spontaneous exchange of knowledge indicates that the organization has positive and trusting culture.

Milway and Saxton (2011) have identified four elements of organizational learning (figure 8). First the leaders must be committed by being role models themselves and by providing vision, and goals for learning outcomes. Second, the leaders need to ensure continues improvement. This can be implemented through the organizational culture which sets the expectations for the employees. The culture also provides the means for measurability of the learning outcome as well as incentives. Third, the leaders need to address those who are responsible actors in knowledge capturing, choosing and sharing knowledge. The actors and leaders are also responsible for providing knowledge for the right people, at the right time. Last, the organization must match the knowledge process with how people work. These processes define how the employees specify the learning agenda, and how they capture, distill, and apply knowledge. The processes also contain the IT - systems for exchanging knowledge but the emphasis is on face-to-face communication.
March (1991: 71) presents two basic types of organizational learning activities:

1. **Exploration** (feedfoward) *which includes search variation, risk taking, experimentation, play, flexibility, discovery, and innovation* (March 1991: 71). The aim is to identify new alternatives, in which goals are uncertain and remote in time.

2. **Exploitation** (feedback) *which includes refinement, choice, production, efficiency, selection, implementation, and execution* (March 1991: 71). The aim is to improve the aspects that already exist, already learned, making the goals predictable and near in time.

In other words, exploration is started by new knowledge being created by individuals' through research processes, and production and implementation of new ideas (March 1991: 71-87). The idea is to generate a problem to which the new knowledge is a solution. The final stage is that the new knowledge is implemented to the organization by
other individuals using it (March 1991: 71-87. Exploitation takes use of the existing organizational knowledge by distributing it to those who need it, individuals or group (March 1991: 71-87).

March (1991: 71–87) explains that the organizations that engage only to exploration to the extent of excluding exploitation functions might find that they suffer the costs of experimentation without gaining many of its benefits (March 1991: 71-87. Vice versa, if the organization focuses only on exploitation and excludes exploration they might end up with stagflation without going forward. The balance between the both functions guarantees survival and prosperity (March, 1991: 71–87). Organizations are making implicit and explicit choices between these two functions, March (1991: 71) explains further:

The explicit choices are found in calculated decisions about alternative investments and competitive strategies. The implicit choices are buried in many features of organizational forms and customs, for example, in organizational procedures for accumulating and reducing slack, in search rules and practices, in the ways in which targets are set and changed, and in incentive systems. (March 1991: 71)

It is deemed that both functions are needed; however, whenever one is in focusing it automatically reduces the focus from the other.

The social context of organizational learning presents some trade-offs of exploration and exploitation (March 1991: 71–87). Two has been identified:

1. Mutual learning of an organization and the individuals in it. 
Organizations store knowledge in their procedures, norms, rules, and forms. They accumulate such knowledge over time, learning from their members. At the same time, individuals in an organization are socialized to organizational beliefs. This mutual learning has implications for understanding and managing the trade-off between exploration and exploitation in organizations. (March, 1991: 73–74)

2. The context of competition for primacy. 
Organizations often compete with each other under conditions in which relative position matters. The mixed contribution of knowledge to competitive advantage in cases involving competition for primacy creates difficulties for defining and arranging an appropriate balance between exploration and exploitation in an organizational setting. (March, 1991: 73–74)
The balance is crucial for organizations to be able to succeed.

Organizational learning or learning organization? Ötenblad (2001: 125–133) and Yang et al. (2004: 31–55) differentiate the two by telling us that organizational learning is an activity of collecting information and developing skills leading in the learning concept within any organization, in comparison to learning organization that is the organization that implemented and conducts continues learning. However, the difference is not as clear for all the authors within the field.

Garvin (1993: 80) Defines learning organization:

A learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.

According to Garvin (1993: 81–83) these learning organizations have to perform five activities:

1. Systematic problem solving,
2. experimentation with new approaches,
3. learning from their own experience and past history,
4. learning from the experience and best practices of others,
5. And transferring knowledge quickly throughout the organization.

Along with the lines of exploration and exploitation in organizational learning is the connection between knowledge stocks and flows (Decarolis and Deeds, 1999: 953–968). The knowledge flow presents the movement of knowledge, exploration flows indicate knowledge being transferred from the individual and/or group to the organization. These types of transfers enable development and assimilation within the organization, reshaping the beliefs and behaviors already existing (Decarolis and Deeds, 1999: 953–968). Exploitation flows works the other way, from organization towards the groups and/or individuals (Oviedo-Garcia et al. 2014: 74–110). The knowledge stocks are the existing knowledge, explicit and tacit, in the organization. Furthermore, it is both organizational knowledge as well as knowledge of the individuals (Decarolis and
Deeds, 1999: 953–968). Organization cannot learn without the activity of learning conducted by the individuals within the organization. According to Oviedo-Garcia et al. (2014: 74–110) there are three essential levels of learning (three knowledge stocks) in any given knowledge based organization: individual, group and organizational.

The individual level is seen as necessary for innovativeness and renewability of organization. (Cross and Baird 2000: 69–78) Quoting Argote (1999) Oviedo-Garcia et al. (2014: 74–110) point out the problems which the human factor brings to equation with the issues when employees leave and take their individual knowledge with them or are reluctant to share their knowledge.

The group level requires learning in social level, with relationship building and collective goals (Oviedo-Garcia et al.) This communication is called learning language by Nonaka and Takeuchi cited in Oviedo et al.

The organizational level of learning constitutes the knowledge and abilities cultured into systems, structures, procedures and strategy (Bontis, Crossan, and Hulland 2002: 437–470)

Hence, the organizational memory.

Organizational memory is a sub-set of organizational learning featuring information stored for the future individual and corporate uses. (Rusaw 2004: 486)

According to Rusaw (2004: 482–499) organizational memory is information, rules, procedures, directives, coordination, evaluation, rewards, shared assumptions, beliefs, attitudes, and behaviors leading in to organizational culture. Furthermore, organizational learning and organizational memory are linked together because without learning there will be nothing to remember but without the memory there will not be learning in the form of development in the organization, which in the long run should lead to innovation, and in the end to competitive advantage (Abel 2008: 15–30).

Popper and Lipshitz (2000: 181–196) differentiate between "learning within" which describes the individual level and "learning of" which describes the collective level. They
describe the seamless connection in the actions which constitutes organizational learning and allows the organization to collect and interpret information and experiences, enabling the distribution of valued knowledge throughout the organization.

Huber (1991: 89) defines four attributes of organizational learning:

1. **Existence**: An organization learns if any of its units acquires knowledge that recognizes as potentially useful for the organization.

2. **Breadth**: More organizational learning occurs when more of the organization's components obtain this knowledge and recognize it as potentially useful.

3. **Elaborateness**: More organizational learning occurs when more and more varied interpretations are developed, because such development changes the range of potential behaviors.

4. **Thoroughness**: More organizational learning occurs when more organizational units develop uniform comprehension of the various interpretations of organizational learning. (Huber, 1991: 89)

The theory of organizational learning is partly challenged by Nonaka and Takeuchi (1995) with their concept of "knowledge building company". The focus in their theory is on knowledge and how it is created, rather than focusing only on learning. They claim that theory of organizational learning ignores the origin of the knowledge that leads into learning.

The connection between the theories can be found in the results. Knowledge building company in practice is very similar to learning organization. The similarity can be found in the relation of individual knowledge or learning to group or organizational learning. The aim in both is to harness the experience and information obtained by the individuals in the organization for the benefit for all (Nonaka and Takeuchi 1995). In addition, the end goal is the same with both theories: to be able to gain and maintain competitive advantage (Dutrenit 2000). Organizations have shifted their search for competitive advantage from means funding, research and development (R&D), production tools and distribution to people - employees. This shift has woken the human resource professionals to a whole new role, which is discussed on the next chapter.
5. STRATEGIC HUMAN RESOURCE MANAGEMENT

People, hence employees, are considered as the most valuable asset in any organization (Pahuja and Dalal 2012: 35–43). This is a modern take on competitive advantage, since all the other means have been tried. Leaders in organizations have lately realized that recruiting the right people, placing them to right positions and rewarding them accordingly leads to better results. This development has shifted the role of HR professionals from function to managing partners.

The shift towards recognizing HR functions as one of the most important in the organization happened in beginning of the 90s (Todericiu and Serban: 2013: 1682–1689). HR was seen as strategic partner in achieving goals as well as competitive advantage. Definitions of SHRM include:

"The undertaking of all those activities affecting the behavior of individuals in their efforts to formulate and implement the strategic needs of business” (Schuler 1992: 30)

"Strategic human resources management is largely about integration and adaptation. Its concern is to ensure that: (1) human resources (HR) management is fully integrated with the strategy and the strategic needs of the firm; (2) HR policies cohere both across policy areas and across hierarchies; and (3) HR practices are adjusted, accepted, and used by line managers and employees as part of their everyday work." (Schuler 1992: 18)

“‘The pattern of planned human resource deployments and activities intended to enable the organization to achieve its goals’” (Wright & McMahan 1992).

"An approach to the management of human resources that provides a strategic framework to support long-term business goals and outcomes. The approach is concerned with longer-term people issues and macro-concerns about structure, quality, culture, values, commitment and matching resources to future need." Definition by the Chartered Institute of Personnel and Development (CIPD) (Armstrong & Baron 2002).

Strategic human resource management definitions clearly state that by making the HR functions strategically meaningful will have an impact on how the organization functions. Defining or re-defining strategy in an organization is usually a result of reacting to ever-changing market situation, maintaining market position, growth or cutting costs.
Since organizations have evolved from production based to knowledge based, the implementation of strategy throughout the organizational levels becomes more meaningful. All the employees in the organization should be as knowledgeable about the strategy as the managers are.

According to James (2010: 23–27) the HR professionals whom work in SHRM need to own a specific skill set of their own to be able to carry out the roles as business partner and change agent, including core competencies like business knowledge, vision of the strategy, reliability and validity and internal consulting skills. It is important that the HR professionals are included in the planning of strategy implementation as well as the implementation itself (James 2010: 23–27). HR partners are involved with the employees in the most important stages of their professional lives.

Like indicated before in this chapter, the HR partners in the strategic HR should be knowledgeable of the core business of the organization as well as their own field. Greater understanding of the core business is mandatory for HR professionals to be able to carry out the strategic actions for integrating the human capital to business strategy (Pourkiani et al. 416–420).

The 5-P model indicates how the five P's (Philosophy, Programs, Programs, Practices, and Processes) of HR connect with strategy. However, as Schuler clearly states, the five P's are not automatically strategic functions, they need to be linked methodically.

The 5-P model indicates the strategic human resource activities.
Table 5. The 5-P model (Modified from Schuler 1992: 18–32).

<table>
<thead>
<tr>
<th>Human Resources Philosophy</th>
<th>Expressed in statements defining business values and culture</th>
<th>Expresses how to treat and value people</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources Policies</td>
<td>Expressed as shared values (guidelines)</td>
<td>Establishes guidelines for action on people-related business issues and HR program</td>
</tr>
<tr>
<td>Human Resources Programs</td>
<td>Articulated as Human Resources strategies</td>
<td>Coordinates efforts to facilitate change to address major people related business issues</td>
</tr>
<tr>
<td>Human Resources Practices</td>
<td>For leadership, managerial, and operational roles</td>
<td>Motivates needed role behaviors</td>
</tr>
<tr>
<td>Human Resources Processes</td>
<td>For the formulation and implementation of other activities</td>
<td>Defines how these activities are carried out</td>
</tr>
</tbody>
</table>

The new class of knowledge organizations needs different type of managerial actions through out the organization. Strategic HR partners are in they focus because they are in the center of things because of their responsibilities with the hiring, training, and letting go of employees. Pourkiani et al. (2011: 416–420) write that:

"Systems of HR practices lead to organizational performance only when they are properly aligned with one or more contingent variables of the organization. If organizations are creating strategic advantages through a knowledge-creation capability, then configurations of SHRM practices should be used to build the workforce characteristics (human capital, motivation, and turnover) which lead to this capability. (Pourkiani et al. 2011: 417)

The journey for organization that desires change from traditional to knowledge-based is long and it requires many changes is the operations, actions as well as in the management. Paton (2013: 20–38) suggests that best results will be achieved when organization
is built around the knowledge workers rather than the other way around. Todereciu and Serban (2013: 1682-1689) continue:

"...the processes of the organization must focus on communication and coordination rather than command and control because direct supervision of knowledge workers is difficult, so implementing an organizational design that relies upon a vertical hierarchy is impractical." (Todereciu and Serban 2013: 1683)

Molineux (2013: 1588–1612) introduces the change model which describes the linking of SHRM with organizational culture change. In his model he emphasizes the systemic thinking (5.) as the critical starting point, for it aids the comprehension of the business direction (1.), environmental factors (2.), business cycles (4.) and the influence of existing culture (3.) of the organization.

The systemic thinking component is critical to avoiding pitfalls. Systemic thinking should avoid "quick fixes", as the understanding of underlying structure, context and culture will enable the leaders of the organization to develop a philosophy and design that aims to provide a fundamental solution, rather than creating a symptomatic solution. (Molineux, 2013: 1599)
Figure 14. The change model - how the systematic SHRM affects the organizational culture (Molineux, 2013: 1599).

The quick fixes described by Molineux (2013: 1588–1612) can result in unintended change of organizational culture if, using the authors example, the management result in firing and hiring employees in a periodicity that affects the motivation of the employees.

To conclude, the SHRM is modern take on HR - practices that serves the organization in its effort to achieve the set strategic goals. Furthermore, it should ease the organizations transition from traditional management to knowledge management by recognizing the employees as knowledge workers (Molineux 2013: 1588–1612).
6. KNOWLEDGE MANAGEMENT, ORGANIZATIONAL LEARNING, AND ORGANIZATIONAL CULTURE IN PUBLIC SECTOR

Are there identifiable differences in knowledge management in public sector compared to private sector? The public sector organizations by definition are federal, state, county, municipal, and local level government this means all organizations, agencies, governmental corporations, the size varying from large departments to very small municipal departments. Furthermore, military and police operations are included (McNabb 2007). Public sector differs from private sector with:

- Are more constrained in their choices of procedures
- Perform activities that are mandated by political forces
- Face more external formal controls and specifications on their actions
- Deal with greater external influence on what they do and how they do it
- Gain approval from a wide variety of stakeholders
- Have multiple, often contradictory, objectives
- Have less autonomy and control over decision making and human resources
- Are less able to device incentives for staff performance
- And are often forced to have their failures – large and small – aired at the public press (McNabb 2007: 5).

Most of the business tools, like several managerial theories, used in the public sector have been first developed, tried and proved to be useful in private sector organizations after that they are adopted by the public organizations (McNabb 2007). Liebowitz (2003: 69–76) describes KM as one of the key pillars of the human capital structure in governmental organizations.

Modern government faces many challenges in the changing world, like terrorism, rapid development of technology and science, globalism, immigration, changing the government organizations to market-oriented and knowledge-based, and the on-going development in the governmental functions "doing more with less" (McNabb 2007). In addition, there reform of public management requires public organizations to become more customer-oriented, market-driven, and results-oriented (Liebowitz 2003: 69–76).
McNabb (2007) describes the need for knowledge management in the public sector:

*The organizational drive is to harness the existing knowledge in government agencies to foster creative problem solving by government workers as all levels. Knowledge management is a key component in this new way of functioning* (McNabb 2007: 3).

On-going changes as well as the reform of public sectors and collaboration with private sector organizations demand the change of organizational culture from bureaucratic and traditionally hierarchical to open, flat and empowering to employees (McNabb 2007). The culture of organization has been found to be the key element in the successful implementation of knowledge management in public organizations (Liebowitz 2003: 69–76).

Organizational culture forms a basis for informal and formal knowledge transfer, for it fosters the openness and team-effort. Furthermore, without co-operative behavior and trust, which result in positive attitudes towards knowledge sharing, it does not happen, it is nearly impossible to get employees to share their knowledge without willingness to do so (Syed-Ikhsan 2004: 95–111). Researchers have found that the difficulty of knowledge sharing on public organization is based on the hierarchical and bureaucratic culture tendencies, knowledge is seen as personal power to enable promotions (Syed-Ikhsan 2004: 95–111). On the other hand, knowledge sharing has been proved to result in successful achievement of organizational tasks purpose like delivering to stakeholders, saving in costs and budget savings (Oviedo-Garcia *et al.* 2014: 74–110).

These special aspects of the public sector organizations form unique challenges for successful implementation of knowledge management.
Chapter seven is the empirical part where several case studies will be reviewed. The aim of this part is to identify the connection between theories presented earlier in this thesis. The expectation is that the theories of knowledge management KM, strategic human resource management SHRM, organizational learning OL, and organizational culture OC are found to be intertwined with each other in the empirical case studies.

Cases have been chosen by their theoretical basis as well as the type of organization they study. Most of the cases are public organizations or state owned private companies. They are all profit or otherwise result-seeking organizations.

The geographical focus is in the Middle East, the Americas, Malaysia, Australia and Europe.

**Table 6 Case studies.**

<table>
<thead>
<tr>
<th>Case nr / Authors</th>
<th>Title</th>
<th>Country</th>
<th>Organization</th>
<th>Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case 1 Willem &amp; Buelens</td>
<td>Knowledge sharing in public sector organizations: The effect of organizational characteristics on interdepartmental knowledge sharing</td>
<td>Belgium</td>
<td>Public</td>
<td>Knowledge sharing, public sector, Trust</td>
</tr>
<tr>
<td>Case 2 Joia &amp; Lemos</td>
<td>Relevant factors for tacit knowledge transfer within organizations</td>
<td>Brazil</td>
<td>Private</td>
<td>Knowledge management, tacit knowledge, knowledge transfer, government controlled</td>
</tr>
<tr>
<td>Case 3 Syed-Ikhsan &amp; Rowland</td>
<td>Knowledge management in a public organization: A study on the relationship between organi-</td>
<td>Malaysia</td>
<td>Public</td>
<td>Knowledge management, public sector, knowledge creation,</td>
</tr>
<tr>
<td>Case 4</td>
<td>Tabasi, Vaezi &amp; Alvani</td>
<td>Relationship between strategic human resource management practices and organizational innovation with respect to the role of organizational learning</td>
<td>Iran</td>
<td>Private</td>
</tr>
<tr>
<td>Case 5</td>
<td>Palos &amp; Stancovici</td>
<td>Learning in organization</td>
<td>Romania</td>
<td>Both</td>
</tr>
<tr>
<td>Case 6</td>
<td>Oviedo-Garcia, Castellanos-Verdugo, Del Junco and Ri-quelme-Miranda</td>
<td>Organizational learning capacity and its impact on the results in a government agency in Chile</td>
<td>Chile</td>
<td>Public</td>
</tr>
<tr>
<td>Case 7</td>
<td>Liebowitz</td>
<td>Aggressively pursuing knowledge management over 2 years: a case study at a US government organization</td>
<td>USA</td>
<td>Public</td>
</tr>
<tr>
<td>Case 8</td>
<td>Razouk, Bayad and Wannenmacher</td>
<td>Strategic human resource management and tacit knowledge transfer: A case study</td>
<td>France</td>
<td>Private</td>
</tr>
<tr>
<td>Case 9</td>
<td>Jayasingam, Ansari, Rama-</td>
<td>Knowledge management practices and performance: are they truly linked</td>
<td>Malaysia</td>
<td>Private</td>
</tr>
</tbody>
</table>
7.1. Case 1

Annick Willem and Marc Buelens (2007: 581–606) conducted a study where they surveyed Belgian public sector workers. The sample was 358 respondents from 90 different public sector organizations. The focus of the study is the relationship between knowledge sharing and organizational characteristics in public sector organizations. They seek answers to two questions:

1. What kind of bridges between departments in public sector organizations are required to make interdepartmental sharing of knowledge possible?

2. Which organizational characteristics are dominant in knowledge sharing?

Respondents were asked to identify a cooperative episode between their department and one other department in the same organization and briefly describe it. The episodes were varied from internal client-supplier relationships to common projects and tasks,
providing information and explanations, planning and co-coordinating tasks. (Willem and Buelens 2007: 581-606)

The study measures the knowledge sharing intensity and effectiveness, hence how the shared knowledge benefitted the receiving organization.

Key measurements of the study:

- **Independent variables:**
  - **Formal systems** are planned and formally established like formal procedures, rules, manuals and formal processes
  - **Lateral coordination** is also formal but not planned, examples include teamwork, liaison roles, task groups and mutual adjustment
  - **Informal coordination** includes all informal coordination (Willem and Buelens 2007: 581-606)

Willem and Buelens (2007: 581-606) propose that the amount of knowledge sharing increases in situations that are less formal. In addition, the presence of both lateral coordination and informal coordination results in stronger cooperative episodes.

- **Contextual organizational variables:**
  - **Power games** - to what extent relationships between units are strained because of power games and favoritism
  - **Trust** - believing that the other party in the cooperative episode is reliable and trustworthy.
  - **Identification** - the willingness of people to sacrifice for the unit and the organization's goals (Willem and Buelens 2007: 581-606)

- **Control variable:**
  - **Incentives** - the extent to which cooperative behavior and also knowledge sharing were stimulated in the organization through including
teamwork and knowledge sharing in the employees evaluation processes and by making teamwork and knowledge sharing an explicit organizational goal. (Willem and Buelens 2007: 581-606)

The authors propose that more trust and identification results in more knowledge sharing, and the more public the organization is, the less identification leading in to less knowledge sharing. In addition, the more power games, the less knowledge sharing, with the added effect of how public the organization is, thus, more public, more power games, the less knowledge sharing. Lastly, the fewer power games with informally coordinated cooperative episodes the more knowledge sharing. (Willem and Buelens 2007: 581-606)

7.1.1. Results

The results indicate that the formal systems are not the dominating coordination in public organizations as would be expected by the theoretical framework. The knowledge sharing intensity was lower in formal situations, thus, having a greater impact. The authors conclude that formality in public organizations is not the greatest challenge to overcome even if the bureaucratic tendencies and "red-tape" indicated in the public management theory suggests so (Willem and Buelens 2007: 581-606). Lateral coordination was experienced to be of an importance and effective in knowledge sharing. Through correlation with formal systems, it was evident that formality is necessary, supporting the lateral coordination. Informal coordination did not result in more knowledge sharing but the effectiveness of the knowledge shared (Willem and Buelens 2007: 581-606). The reason behind this finding in literary bases on the notion that informality creates trust and openness. However, in this study the informal mode scored low on trust and high on power games. Furthermore, people were creating informal coordination to form personal networks and gain knowledge for their own benefit, resulting also benefiting their organization as well. In addition, the lateral coordination was needed as source of informal coordination because it provided a source of networking and knowledge sharing opportunities (Willem and Buelens 2007: 581-606).
Evidence indicated that trust was the most dominant variable, people were more willing to share their knowledge as well as the knowledge was more effective. Trust was seen as opposite of power games (Willem and Buelens 2007: 581-606). However, power games correlated with informal coordination so that people whom were more involved with informal coordination were more knowledgeable than others in the organization. These people had more networks, resulting in knowing who to turn to with what information, they were able to build their networks trough the informal structure of the organizations (Willem and Buelens 2007: 581-606). On the negative perspective, this results in more power games. However, it was also discovered that informal cooperation could also be favored because people felt protected from opportunistic behavior.

Evidence indicates that government institutions experience low organizational commitment which has an negative impact on knowledge sharing. However, even greater challenge is the lack of incentives. These two threats combined can lead to serious problems with knowledge-sharing effectiveness. Literature has indicated that incentives are very important for level of organizational commitment in public organizations. According to the authors' cooperative behavior and knowledge sharing was not encouraged in the organizations of their sample. (Willem and Buelens 2007: 581-606)

7.1.2. Reflection

Case 1 presented the knowledge sharing practices in public sector organizations, defining the effect of formality in knowledge exchange situations and the contextual characteristics which have or might have an effect. (Willem and Buelens 2007: 581-606)

The findings were partially in line with public management theories, however, authors found that public organizations were not in fact as bureaucratic and full of "red tape" as they had expected (Willem and Buelens 2007: 581-606). Employees were sharing knowledge mostly in lateral coordination when it is not preplanned, as well as in informal situations. These exchanges were also connected with trust and power games. Reflecting on the theory in this thesis one could conclude that neither the organizational culture nor the basics of organizational learning is fully implemented resulting in the issues (Willem and Buelens 2007: 581-606). Furthermore, case 1 shows the results for
public organizations employees sharing knowledge in formal but also in informal situations, as presented in the theory in this research trust plays crucial role in the quantity and quality of knowledge shared. In addition, power games were present in the exchange indicating that employees were forming networks throughout the organization.

Case 1 clearly indicates the vulnerability of public organizations where employees are not committed, even more so if the use of incentives is low or they do not motivate. Managers should encourage knowledge sharing and networking throughout the organization to other departments as well as within the team, furthermore, managers should reward knowledge sharing behavior or at least make sure that the employees know that knowledge sharing is a part of the organizations strategy (Willem and Buelens 2007: 581-606). Especially, tacit knowledge sharing benefits, as proved in theory part of this research, the organization making it stronger, innovative and then also enabling the public management ideology "do more with less"

7.2. Case 2

Luiz Antonio Joia and Bernardo Lemos (2010: 410–427) conducted a research where they made a questionnaire about tacit knowledge transfer to a large government-controlled and publicly listed Brazilian oil company Petrobras. The answerers were all working in the marketing and sales division of Petrobras Joia and Lemos 2010: 410–427). The explain that the reason for choosing this specific organization was that the organization is a major player in its field being positively affected by the deregulation of the Brazilian oil market. Furthermore, the company has not hired any new employees in 12 years. As a result the managers decided to implement a knowledge management program to transfer knowledge between the old and new employees (Joia and Lemos 2010: 410–427).

They defined twelve (12) indicators associated with tacit knowledge transfer based on respective theoretical references:
1. Individual management of time
2. Common language
3. Mutual trust
4. Relationship network
5. Reward
6. Type of training
7. Knowledge transference
8. Knowledge storage
9. Power
10. Favorable environment for questioning
11. Type of valued knowledge

The idea was to discover the most influential indicators. The sample size was 139 new and old employees. (Joia and Lemos 2010: 410–427).

7.2.1. Results

The results indicated that there was a positive level of trust, which created the base for knowledge transfer. The trust level was explained with the theory of internal regime of public organization versus private one. Mutual trust was enforced by the common language which the employees seemed to be aware Joia and Lemos 2010: 410–427). In addition, experience and opinions are valued in the organization, these attributes are building blocks of tacit knowledge. Furthermore, the individual time management played also a part in the results, thus this is a organization specific managerial attribute. (Joia and Lemos 2010: 410–427).

On the training methods, the employees preferred mentoring and couching compared to IT based training, this style of training enforces the new employees to learn the common language and personalization Joia and Lemos 2010: 410–427). Informal organizational-structure enables the professionals to network, leading in to the possibility of locating whatever knowledge they are in need of trough these networks. Flexibility in organiza-
7.2.2. Reflection

Case 2 indicates clearly that when knowledge management is implemented properly it leads to trust-environment, common language, networking and effective training methods. However, the organizational culture was already clearly implemented with the old employees who allowed them to welcome the new employees and communicate with the language that they all understood. (Joia and Lemos 2010: 410–427).

The results in comparison to the theory presented earlier in this research reinforce the need of knowledge management. Employees take the advantage of networking as trust and common language building exercise. They also valued the coaching and mentoring as a good way to break in new professionals.

The presence of SHRM was not indicated in this study, however they were able to hire new employees that were able to integrate themselves in the organization. The implementation of knowledge management seemed to be successful in this case. (Joia and Lemos 2010: 410–427).

7.3. Case 3


*The ministry was formed 1995, to assume the full responsibilities of the Ministry of Public Enterprise. The mission of the ministry was to create and develop genuine entrepreneurs who will be high quality, and are resilient, successful and competitive in all economic sectors. The ministry employees about 550 staff, engaged in planning (policy) and planning development, commercial vehicle licensing, civil contractors services, project and program development, monitoring franchise and vendors program, entrepreneurship training program and entrepreneur development program. (MED annual report, 1999 cited in Syed-Ikhsan and Rowland 2004: 97)*
The questionnaire was given to 204 respondents' through out the organizations headquarters as well as in regional and state offices, the answering rate was over 75% (Syed-Ikhsan and Rowland 2004: 95–111).

The conceptual framework consists of five main groups of factors:

1. Organizational culture
   - Sharing culture
   - Individualism (Syed-Ikhsan and Rowland 2004: 95–111)

2. Organizational structure
   - Document confidentiality status
   - Communication flow (Syed-Ikhsan and Rowland 2004: 95–111)

3. Technology
   - ICT infrastructure
   - ICT tools
   - ICT know-how (Syed-Ikhsan and Rowland 2004: 95–111)

4. People / Human resources
   - Posting
   - Training
   - Staff turnover (Syed-Ikhsan and Rowland 2004: 95–111)

5. Political directives
   - Directive from politicians (Syed-Ikhsan and Rowland 2004: 95–111)

These factors are connected with the dependent variables

1. Knowledge transfer performance
   - Speed
   - Reliability
   - Accuracy (Syed-Ikhsan and Rowland 2004: 95–111)

2. Knowledge assets
   - Explicit knowledge
   - Tacit knowledge (Syed-Ikhsan and Rowland 2004: 95–111)
The authors have defined three main questions to evaluate the performance of knowledge management in the ministry:

1. How fast is knowledge transferred in the ministry?
2. How accurately is the knowledge transferred?
3. How reliable is the knowledge? (Syed-Ikhsan and Rowland 2004: 95–111)

Knowledge assets are the key to decision making and that is why any given organization needs to define where its knowledge resides. The hypothesis 1 is that there is a positive relationship between knowledge assets and knowledge transfer performance (Syed-Ikhsan and Rowland 2004: 95–111). Hypothesis 2 is that tacit knowledge availability correlates positively with knowledge transfer performance as well as explicit knowledge as hypothesis 3. (Syed-Ikhsan and Rowland 2004: 95–111)

The independent variables of the study include the factors in mentioned earlier.

7.3.1. Results

The authors have found that the more there is knowledge to share the more it is shared, in addition the better individuals were sharing tacit knowledge the better the knowledge transfer performance (Syed-Ikhsan and Rowland 2004: 95–111). Individuals also affect the knowledge sharing performance with their personal knowledge sharing culture. Sharing culture had positive correlation with organizations knowledge assets. The findings showed that people worried about sharing knowledge as well as considering it as leverage to keep for themselves. Confidentiality of the knowledge also played a role in how easy it was to share, thus it had no greater effect. They did not identify barriers in knowledge sharing between departments (Syed-Ikhsan and Rowland 2004: 95–111).

Technology was found to have a positive effect on performance of knowledge sharing, for it aids the organization to implement the information and knowledge gathering, storing and classification furthermore, ICT infrastructure correlates positively with
knowledge assets, but not with knowledge transfer performance (Syed-Ikhsan and Rowland 2004: 95–111). ICT tools help the creation and storing of knowledge. In addition, the knowledge creation correlates positively with ICT know-how (Syed-Ikhsan and Rowland 2004: 95–111).

Authors found that training did not affect on knowledge transfer performance. However, high levels of adequate training results in high creation of knowledge, and high knowledge transfer performance (Syed-Ikhsan and Rowland 2004: 95–111). They also found that procedures of retaining knowledge from employees leaving also retain the knowledge assets. Directives from politicians positively correlate with knowledge transfer performance and knowledge creation assets (Syed-Ikhsan and Rowland 2004: 95–111).

7.3.2. Reflection

The authors found that availability of knowledge assets affects on knowledge transfer, furthermore, this indicates that all organizations need to implement proper knowledge management to cover both explicit and tacit knowledge, for the organization to be able fully benefit from organizational knowledge. Knowledge management should ensure the employees access to all knowledge whether it resides inside or outside the organization (Syed-Ikhsan and Rowland 2004: 95–111).

Managers should also be able to create an organizational culture that enables knowledge sharing and encourages it. This kind of culture creates positive knowledge sharing culture, which leads to high knowledge transfer performance as well as high knowledge assets. Sharing the right knowledge to right people with the right method and at the right time should be the core of knowledge management. The author found that a high level of individualism leads to less knowledge transfer. As a part of knowledge management, managers should prevent knowledge of becoming a source of power, encouraging and even rewarding knowledge transfer. Training was not found to be significant in correlation with knowledge transfer, but great significance to knowledge assets. This indicates that the importance of retaining the knowledge of employees leaving the organization is
important. Captivating tacit knowledge from individuals and changing it to organizational knowledge is important, otherwise the tacit knowledge is lost.

Knowledge management seems to benefit from ICT tools. The authors found a correlation with ICT and knowledge transfer performance and knowledge assets. In addition, they found that proper training in ICT resulted in enhanced knowledge transfer. ICT also allows employees to harvest knowledge outside the organization.

In conclusion, the organization should be able to grow its knowledge assets by creating knowledge sharing community where people feel safe and are willing to share what they know with others. This behavior should be even rewarded. In addition, technology helps the knowledge storage and gaining from sources outside the organization. It is important to collect the tacit knowledge from individuals before they leave the organization.

7.4. Case 4

Tabasi, Vaezi and Alvani (2014: 170–185) have written their empirical study on strategic human resource management and its connection to organizational learning. The authors conducted the study in Iran in the field of Petrochemical industry.

The aim of the study was to determine whether strategic human resource management SHRM has an effect on innovation performance of the organization. The aim more specified:

- Determine the relationship between SHRM practices and organizational learning
- Determine the relationship between organizational learning and organizational innovation (Tabasi, Vaezi and Alvani 2014: 170–185)
Strategic human resource management practices

<table>
<thead>
<tr>
<th>Employment</th>
<th>Organizational learning</th>
<th>Organizational innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training employees</td>
<td></td>
<td></td>
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<tr>
<td>Participation</td>
<td></td>
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<tr>
<td>Performance evaluation</td>
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<tr>
<td>Compensating services</td>
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</tbody>
</table>

**Figure 15.** Research model (Tabasi, Vaezi and Alvani, 2014: 170–185)

The hypothesis are as follows:

**Primary**
1. There is a significant relationship between SHRM practices and organizational innovation
2. There is significant relationship between SHRM and OL
3. There is significant relationship between organizational innovation and OL (Tabasi, Vaezi and Alvani 2014: 170–185)

**Secondary**
4. There is a significant relationship between employment and organizational innovation (Tabasi, Vaezi and Alvani 2014: 170–185)

The authors used two methods for data collection: library method; taking notes and field method; interviews. The subjects for interviews were chosen from the senior managers
and experts working in the Iran’s petrochemical industry companies with SHRM practices (Tabasi, Vaezi and Alvani 2014: 170–185).

7.4.1. Results

The results showed significant correlation between SHRM practices and the organizational innovation (hypothesis 1) as well as all the other hypothesis. The results were confirmed by both of the research methods (Tabasi, Vaezi and Alvani 2014: 170–185).

7.4.2. Reflection

The authors present significant correlation between the SHRM practices, organizational learning and organizational innovation. The results indicate that the core activities of SHRM: hiring, training, participation, performance evaluation and compensating are crucial for the success of organizational learning, knowledge sharing, leading towards innovation, and even further to competitive advantage (Tabasi, Vaezi and Alvani, 2014: 170–185). The authors recommend that the organization first identifies the SHRM core actions and then apply them accordingly. The better organizations understanding of these practices, the better the results.

The significance of organizational learning to knowledge management and knowledge transfer was present in this research. Evidence that organizational learning and KM result in organizational innovation.

7.5. Case 5

Authors Palos and Stancovici (2016: 2–22) write in their published work about the learning organization. The sample was 64 employees from two organizations - private and public one. The respondents from both organizations were top management, middle management and administrative support employees. The study was conducted as a questionnaire with a Likert scale.
The aim of the study was to establish which of the two companies presents the greater amount of key elements of learning organization and the dimensions of continuous learning. In addition, the authors wanted to establish the connection between the organizational culture and organizational learning in both organizations (Palos and Stancovici 2016: 2–22).

They have formed several hypothesis based on the theoretical framework:

1. The dimensions of organizational learning capability are present to a greater extent in private organizations than in public organizations (Palos and Stancovici 2016: 2–22).

2. The specific dimensions of a learning organization are present to a greater extent in private organizations than in public organizations (Palos and Stancovici 2016: 2–22).

3. The employees of the private organization have a different perception of the specific type of organizational culture in comparison to those belonging to the public organization (Palos and Stancovici 2016: 2–22).

4. The type of organizational culture differently influences and supports factors that facilitate organizational learning (Palos and Stancovici 2016: 2–22).

7.5.1. Results

Hypothesis 1, the five dimensions of organizational learning capacity: experimentation, risk-taking, interaction with the external environment, dialogue and participative decision making were all present to a greater extent in the private organization compared to the public one (Palos and Stancovici 2016: 2–22).
Hypothesis 2, the seven dimensions of learning organization: continuous learning, inquiry and dialogue, team learning, embedded system, empowerment, system connection and provide leadership were all present to a greater extent in the private organization compared to the public one (Palos and Stancovici 2016: 2–22).

Hypothesis 3, the employees of the private organization perceive their culture to be clan culture and market culture and the employees of the public organization perceive their culture to be hierarchy culture (Palos and Stancovici 2016: 2–22).

Hypothesis 4, organizational culture has an effect on how the organizational learning can be facilitated (Palos and Stancovici 2016: 2–22).

7.5.2. Reflection

The study established a difference between the public and private organization with the organizational culture that has an effect on how the organizations learn (Palos and Stancovici 2016: 2–22). The public organization was found to have hierarchy culture which hinders the employees' possibilities to be empowered and participate in the decision making. The private organization was found to have clan culture and market culture which enables the employees to experiment, have a dialogue, and participate in decision making. These results were as expected, however, they also indicate to which extent the organizational culture has an effect on employees and their actions. Furthermore, the limitations on organizational learning will lead to lack of innovativeness.

7.6. Case 6

Case 6 is published work of the authors Oviedo-Garcia, Castellanos-Verdugo, Del Junco and Riquelme-Miranda (2014: 74–110). It is a study of the organizational learning capacity in government agency The National Pension Institute (NPI) which is a part of Chilean Ministry of Labor and Social Security in Chile. The purpose of the organization is to handle the distributing of social benefits to the public. The data collection were ex-
executed as two-part questionnaire, the first concerned the organizational learning capability and the other measuring the organizational performance. The questionnaire was presented to the managers of the organization, sample size was 106 (Oviedo-Garcia et al. 2014: 74–110).

The purpose of the study is to establish connection between learning capability of organizational system, dynamic interaction of stocks and flows of knowledge and its impact on performance (Oviedo-Garcia et al. 2014: 74–110).

7.6.1. Results

The results show that in the NPI the organizational learning capability has an positive effect on the performance of the organization, especially on effectiveness and quality of its functions. In addition, they found a connection that both organizational knowledge flows (exploitative and explorative) and knowledge stocks (individual, group, and organizational) are the components of learning capability that lead to performance (Oviedo-Garcia et al. 2014: 74–110).

The results show that the organizational learning needs to be aligned with the organizations overall strategic aims, otherwise they lose meaning. The public sector managers play a key role in the decision making on what and how to learn. They should also limit the knowledge stocks and flows so that they are absorbable (Oviedo-Garcia et al. 2014: 74–110).

The authors also note that the hierarchical form of public organizations hinder the overall learning process, this aspect should be taken in consideration (Oviedo-Garcia et al. 2014: 74–110).

7.6.2. Reflection

The study found that there is a significant connection with organizational learning and performance. However, they also concluded that the managers should be responsible
what employees should learn and when. Furthermore, connecting these findings with all
the four main theories presented in this thesis, separate knowledge management as well
as strategic human resource management functions could be beneficial (Oviedo -Garcia

The learning should have overall goals that align with the strategic goals of the organi-
zation.

7.7. Case 7

Case 7 is about a study of United States of American government organizations' pursuit
of implementing knowledge management KM. The background of the study is in the
fact that 53% of all government employees will retire before the year 2008, out of which
71% are senior executives (Liebowitz, 2003: 69–76). This change in work force forces
the organization to act upon the issue by capturing, sharing, and applying knowledge.
The other reason is the thrive for government organizations to become more service-

The 2-year plan for implementation of KM to the US government organization is:

First year
- Create an awareness of KM at all levels in the organization.
- Educate people on KM.
- Initiate quick-win, KM pilots with metrics for success (peppered throughout the organization).
- Develop the technology infrastructure to support knowledge sharing.
- Incorporate KM into the organization’s human capital strategy (Lie-

Second year
- Develop the organizational infrastructure to support KM.
- Embed KM processes into the daily working activities of the employees
  (e.g., capture and share lessons learned during each phase of the project
  life cycle).
- Develop a recognition and reward system to promote knowledge sharing
  behaviors.
- Expand the KM pilots into full-fledge KM projects (Liebowitz, 2003: 69–
  76).
Liebowitz (2003: 69–76) continues by identifying the responsible units: Human capital strategy working group along with knowledge management working group, and their tasks as capturing, sharing, and applying knowledge internally and externally. In addition, they develop the human capital strategy for the governmental workforce of the future.

7.7.1. Results

The research Liebowitz (2003: 69–76) has conducted has resulted in the formation of knowledge pyramid that aids the built-up of knowledge management in organizations.

![Figure 16. Building a KM pyramid in a knowledge-centric organization (Liebowitz, 2003: 71)](image)

In addition, to the knowledge pyramid Liebowitz (2003: 69–76) identified the challenges the case company faced like the changing of the management component influencing everyone’s daily work life without adding to the work load. The case company also added the knowledge sharing and learning into the employee performance plan, they made an incentive scheme to reward these activities, resulting in knowledge sharing environ-
ment. The functions were intended as a tool in preventing resistance and encouraging change when implementing KM.

7.7.2. Reflection

The knowledge building pyramid serves as a roadmap for any organization taking on the task of implementing KM in their organization. Like seen in this case making a roadmap in head of time and rewarding the efforts from the employees helps implementation and nurtures the changes which KM brings to the organizations (Liebowitz, 2003: 69–76).

Liebowitz (2003: 69–76) indicates that public organizations are exemplary organizations to take on KM because of the unique status they hold with the public. According to him the governmental organizations can provide improved service and pushing appropriate knowledge to the general public.

The beginning of KM implementation is formulation of KM strategy, then the implementation plan needs to be developed.

7.8. Case 8

Case 8 has been conducted by the authors Abdelwahab Ait Razouk, Mohammed Bayad and Delphine Wannenmacher (2009: 77–82) later Razouk et al. They have studied the connection between strategic human resource management SHRM and transfer of tacit knowledge in French crystal manufacturer. The aim of the study is to understanding the SHRM contribution to tacit knowledge management.

Razouk et al. (2009: 77–82) have chosen the French crystal manufacturer as the case company because of the specific know-how needed for the work. The know-how translates to tacit knowledge which is by nature difficult to transmit. Furthermore, tacit
knowledge requires the implementation of complex learning mechanisms and involvement from management functions like SHRM.

The crystal manufacturer defines its HRM activities in five categories:

1. Recruitment
   The crystal manufacturer needs constantly search for new employees because finding qualified young employees and keeping senior employees from absenteeism and retirement. The manufacturer has established contacts with professional schools to recruit students with right education. Furthermore, the HR-professional makes presentations of the company at the school and starts the recruitment process (Razouk et al. 2009: 77–82).

2. Integration
   A senior member of the staff accompanies the newly recruited and teaches them about the behavior expected, the surroundings outside the workplace like the city or town the factory is located, and general and work task related security (Razouk et al. 2009: 77–82).

3. Training
   The HR-professionals conducts the training as well as selecting and evaluating the competences the new employee has. Then tutorial system is implemented so that it works as intermediate system between training and production tasks. This allows the new employees to improve his techniques (Razouk et al. 2009: 77–82).

4. Succession
   The manufacturer has a problematic age pyramid as the most of the employees are aged which results in retirement and premature departure. They have recognized that there is a lack of time to ensure the transfer of know-how between employees. The company implemented competences matrix which allows the recognition of competencies and the need for further training (Razouk et al. 2009: 77–82).
5. Compensation.

The company has introduced compensation policy to ensure the loyalty of its employees. It is based on three criteria: work behaviors, competencies matrix and assessment of skills. The criteria is evaluated once a year in an individual interview (Razouk et al. 2009: 77–82).

The authors conclude that the crystal manufacturers HR - functions are in line with the objective of knowledge sharing (Razouk et al. 2009: 77–82).

7.8.1. Results

As presented in the last chapter the crystal manufacturer aims its SHRM functions (recruitment, integration, succession and compensation) towards the transfer of knowledge (Razouk et al. 2009: 77–82). The HR- strategy is to mobilize and develop the senior staff as well as remain attractive to the new recruits. The authors' state:

*Thus, HR strategy implemented by the crystal manufacturer allowed, through a sharing culture, mutual confidence and human resources valorization, achieving a progressive capitalization of know-how which ensures the viability of this manufacture.* (Razouk et al. 2009: 81)

The authors wanted, by this article, to implicate how knowledge as well as SHRM practices that ensure the distribution and redistribution knowledge, are critical for organizations. Trough an example of an organization that act upon this desire they show the activities and HR strategy which ensure the organizational performance outcome. They have written:

*...SHRM practices can also be seen like connection between workers and organization. In fact, SHRM ensures individual evolution, recognition within the firm through integration and qualification, bonus and wages, tutorial and transmission of know-how. In the same way it ensures the organizational viability in particular through productivity, quality, motivation and development of worker's loyalty. Thus, SHRM contributes to reconcile economic and social objectives.* (Razouk et al. 2009: 81)
7.8.2. Reflection

It is apparent that the HR strategy and through that the SHRM functions provide a support system for knowledge transfer, for it guarantees the actions that need to be implemented. Tacit knowledge transfer is more difficult than explicit knowledge, because, like presented in this research, the tacit knowledge presents itself as know-how. Furthermore, tacit knowledge tends to reside only in its owners head and sometimes the owners of tacit knowledge do not even know what they know.

7.9. Case 9

Authors Jayasingam, Ansari, Ramayah and Jantan (2013: 255–264) later Jayasingam et al., have conducted a research for 180 knowledge-based organizations in Malaysia. The authors explained that they found Malaysian organizations lagging behind the international standard for knowledge enterprises for they had not been nominated for the winners of The Global Most Admired Knowledge Enterprises (2006) nor complemented in the research made by EPU (2009). They had responses from 582 individuals from 180 organizations in Malaysia (Jayasingam et al. 2013: 255–264).

The authors have experienced that the problem with implementation of KM is the lack of empirical results of KM practices and KM project performance (Jayasingam et al. 2013: 255–264). The two aims of the study was to:

1. To fill the abovementioned gap by providing empirical evidence that there is indeed a link between KM practices and performance using Malaysian organizations (Jayasingam et al. 2013: 255–264).

2. To explore if the abovementioned relationship is contingent upon the size of an organization (Jayasingam et al. 2013: 255–264).

In essence, it is important for organizations to understand how various KM practices influence organization performance as this knowledge will encourage them to accelerate the rate of KM implementation in their respective organizations (Jayasingam et al. 2013: 255–264).
The KM practices consists of three interdependent parts:

1. Knowledge acquisition (creation)
   Incorporation of novel ideas, insights, and solutions to the organization. The process is ongoing and dynamic (Jayasingam et al. 2013: 255–264).

2. Knowledge dissemination
   Sharing all types of knowledge throughout the organization (Jayasingam et al. 2013: 255–264).

3. Knowledge utilization
   Practical use of acquired knowledge in completion of daily tasks, processes and products or services (Jayasingam et al. 2013: 255–264).

The authors present four hypothesis:

1. Knowledge acquisition practices positively influence KM project performance
2. Knowledge dissemination practices positively influence KM project performance
3. Knowledge utilization practices positively influence KM project performance
4. The impact of KM practices (knowledge acquisition and dissemination) on KM project performance is moderated by organization size.
   a. The positive impact of knowledge acquisition practices on KM project performance is greater in smaller organizations than in their larger counterparts
   b. The positive impact of knowledge dissemination practices on KM project performance is greater in smaller organizations than in their larger counterparts (Jayasingam et al. 2013: 255–264).

7.9.1. Results

Findings resulted a partial confirmation on hypothesis 1. The knowledge acquisition from existing employees had a positive influence on strategic and process improvement. On the other hand, the knowledge acquisition through hiring did not present any significant changes (Jayasingam et al. 2013: 255–264). Hypothesis 2 also gets partial support
from knowledge dissemination affecting only on strategic improvement but not to the process improvement. Hypothesis 3 was confirmed with significant improvement on both strategic and process. Hypothesis 4 was partly supported with the notion that small organizations were affected by knowledge acquisition. In addition, even knowledge acquisition trough hiring was not found significantly improving neither of the measurements, the organization size was found to significantly moderate the relationship between hiring practice and process improvement, presenting results in small organizations (Jayasingam et al. 2013: 255–264).

On the basis of these results the authors have drawn the next conclusions:

1. The absence of a significant relationship between knowledge acquisition (hiring) and performance can be attributed to socialization theory. Newly hired professionals may possess relevant knowledge. However, they have yet to familiarize themselves with the management’s expectations and organizational goals and values (Jayasingam et al. 2013: 261).

2. Knowledge dissemination was not found to have a positive influence on process improvement. Evidently, sharing and storing knowledge does not directly guarantee process improvement. Only when specific knowledge or information is needed, would knowledge workers access the system (Jayasingam et al. 2013: 261).

3. The impact of knowledge acquisition upon strategic improvement was found to be greater in smaller organizations (Jayasingam et al. 2013: 261).

4. Although, knowledge acquisition (hiring) did not have a significant effect on either performance yardstick, an interesting interaction was evident (Jayasingam et al. 2013: 262).

5. Although, we hypothesized the positive effect of knowledge dissemination to be greater in smaller firms, that was not the case. Although, larger organizations were found to be at disadvantage with regard to knowledge sharing, the effect of knowledge dissemination on performance was not reduced in any way. (Jayasingam et al. 2013: 262)

They also found that in spite the knowledge acquisition trough hiring is not the amiable solution, the utilization of existing employees’ knowledge trough dissemination and utilization is recommendable.
7.9.2. Reflection

The authors identified that the acquisition of knowledge is more influential done with existing employees rather than trying to hire new professional especially in larger organizations (Jayasingam et al. 2013: 255–264). The reason behind this is that the new professionals have to spend time getting to know the organizations rules and code of conduct and forming personal relationships (Jayasingam et al. 2013: 255–264). However, in smaller organizations this was found to have an effect because smaller organizations tend to less formal so the relationships can be formed faster.

The knowledge dissemination did not seem to have a positive effect mainly because the knowledge is only accessed when it is needed. In addition, the knowledge utilization through existing employees is recommendable because it has an significant effect on strategic and process improvement (Jayasingam et al. 2013: 255–264).

These results support knowledge sharing practices but also indicate the significant position smaller organization hold to larger ones. However, the study does not take into account that the larger organizations are divided into smaller departments which can function on their own like small organization. In addition, the usage of knowledge the existing employees can be redeemed as more important for the organizational knowledge than newly hired experts.

7.10. Case 10

The authors Mojibi, Hosseinzadeh and Khojasteh, later Mojibi et al. (2015: 281–288) have conducted a study of the relationship of organizational culture OC and knowledge management strategy KM in Iranian oil refining company Pars Oil which is publicly owned. The study was conducted to 53 top- and mid-level managers and board members (Mojibi et al. 2015: 281–288).
The Denison organizational culture model (also presented in chapter 3) is employed to present the theoretical framework for this study (Mojibi et al. 2015: 281–288). This model measures four essential aspects of culture and leadership:

1. **Involvement**
   
   Effective organizations empower their employees, building the organization around teams developing the human capital in all organizational levels. This enables the employees to commit to their work and that they own a piece of the organization. Placing the importance to the notion that all employees should at the minimum have the feeling that they can affect on the decision making that affect their tasks and that they work goal-oriented (Mojibi et al. 2015: 284).

2. **Consistency**
   
   Effective organizations tend to have strong cultures that are highly consistent, coordinated accordingly, and well-integrated. This type of consistency provides stability and internal integration resulting from shared mindset and conformity (Mojibi et al. 2015: 284).

3. **Adaptability**
   
   Adaptable organizations are driven by their customers, take risks, learning from their mistakes and are able to create change. On the other hand, best integrated organizations are most difficult to change. The roots for change is the providing value to the customers by improving their systems (Mojibi et al. 2015: 284).

4. **Mission**
   
   Mojibi et al. (2015: 284) tells us that:
   
   *Successful organizations have a clear sense of purpose and direction that defines organizational goals and strategic objectives, and expresses vision of how the organization will look in the future. When organizations underlying mission changes, changes also occur in other aspects of the organization’s culture* (Mojibi et al. 2015: 284).
The reason for the authors for using this specific model are:

- *It evaluates the group's behavior, instead of evaluating personality*
- *Measuring can be done up to the lowest organizational level*
- *It is used at all levels of the an organization.* (Mojibi et al. 2015: 283)

The authors continue:

> Denison’s model states that the four broadly defined cultural traits of involvement, consistency, adaptability, and mission collectively facilitate an organization's capabilities for integrating and coordinating internal resources as well as its adaptation the external environment, thereby leading to superior organizational performance (Mojibi et al. 2015: 283).

The main hypothesis: There is a significant relationship between organizational culture and knowledge management in Pars Oil Company. (Mojibi et al. 2015: 283).

The other hypothesis are:

- *There is a significant relationship between consistency culture and knowledge management strategy (creation and transfer) H1* (Mojibi et al. 2015: 283).

- *There is a significant relationship between involvement and knowledge management strategy (creation and transfer) H2* (Mojibi et al. 2015: 283).

- *There is a significant relationship between adaptability culture and knowledge management strategy (creation and transfer) H3* (Mojibi et al. 2015: 283).

- *There is a significant relationship between mission culture and knowledge management strategy (creation and transfer) H4* (Mojibi et al. 2015: 283).

7.10.1. Results

Main hypothesis is confirmed, there is a significant relationship between organizational culture and company knowledge management strategy (Mojibi et al. 2015: 285–287).
Hypothesis 1 is confirmed, there is a significant relationship between consistency culture and knowledge management strategy (Mojibi et al. 2015: 285–287).

Hypothesis 2 is confirmed, there is significant relationship between involvement culture and knowledge management strategy (Mojibi et al. 2015: 285–287).

Hypothesis 3 is confirmed, there is significant relationship between adaptability culture and knowledge management strategy (Mojibi et al. 2015: 285–287).

Hypothesis 4 is confirmed, there is a significant relationship between mission culture and knowledge management strategy (Mojibi et al. 2015: 285–287).

7.10.2. Reflection

This study recognized the importance of the connection between OC and KM strategy. All of the four culture traits involvement, consistency, adaptability and mission were found to be connected to the KM strategy. Furthermore, there are other studies that show similar results. This is why one could make an overall conclusion that for implementation of KM and Km strategy, the OC is one of the most important building blocks.

7.11. Case 11

Authors Danaeefard, Salehi, Hasiri and Noruzi (2012: 1921–1931) later Danaeefard et al. have studied the impact of emotional intelligence and organizational culture on learning organization in Iranian public service organizations. The study was conducted as a questionnaire to managers, deputy managers and experts in public service providing organizations in specific region in Iran.
The aim of the study is to determine how the managers and experts connect the learning organization, emotional intelligence and the organizational culture. There were no hypothesis presented (Danaeefard et al. 2012: 1921–1931).

7.11.1. Results

The authors expect, based on the theoretical framework, that emotional intelligence provides suitable atmosphere for learning organization. This expectation is confirmed by the results of the questionnaire. The answers confirm that emotional intelligence influences learning organization directly by providing means for the organization to achieve the status of learning organization (Danaeefard et al. 2012: 1921–1931).

They also expected the suitable cultural atmosphere to enable the emergence and development of a learning organization. The results confirm that there is meaningful connection between organizational culture and learning organization. In addition, it was found that bureaucratic culture and competition culture are most harmful culture types for learning organization (Danaeefard et al. 2012: 1921–1931).

Relationship between emotional intelligence and organizational culture was also expected by the authors. The expectation was that emotional intelligence would have positive effect on the development of organizational culture. The connection was confirmed with the results. Self-regulation was found to have the weakest relation, and self-stimulation the highest (Danaeefard et al. 2012: 1921–1931).

Figure 17. Conceptual framework for the study (Danaeefard et al. 2012: 1925)
Lastly, the authors expected there to be a connection between emotional intelligence and learning organization adjusted by organizational culture. This relation was also confirmed, so that the organizational culture has an effect on learning organization by emotional intelligence as the founding factor (Danaeeffard et al. 2012: 1921–1931).

Conclusion of the results is that there is an encouraging connection between emotional intelligence and organization achieving the status of learning organization. In addition, the components of emotional intelligence: self-awareness, self-regulation, sympathy, social skills and self-stimulation have a direct meaningful connection with learning organization. Self-stimulation as the most meaningful (Danaeeffard et al. 2012: 1921–1931).

In addition, the connection between organizational culture and learning organization was tested and proved. This leads to the notion that improvement of organizational culture can enhance the aspects of learning organization in the organizations which were studied (Danaeeffard et al. 2012: 1921–1931).

7.11.2. Reflection

The research was aimed to establish empirical connection to test the theory of the connection between emotional intelligence, organizational culture and learning organization (Danaeeffard et al. 2012: 1921–1931). The theory in this thesis supports these findings as well. However, in this thesis the theory of emotional intelligence has not been discussed.

The empirical results confirm the relation between emotional intelligence and organizational culture working towards the benefit of the organization be able to established itself as learning organization (Danaeeffard et al. 2012: 1921–1931).

Organizational learning, hence the learning organization is a dynamic function as is organizational culture as well. The organizations ability to change its culture as well as the learning objectives are crucial for successful organizations. Since the organization is
made up with employees hence people, with social desires and relationships, it is important that the aspects of emotional intelligence have been noted. Emotional intelligence aids the collective desire to succeed.

Organizational culture truly is the basis for learning organization as well as knowledge transfer.

7.12. Case 12

The last case is written by author John Molineux (2013: 1588–1612), he is researching the change or organizational culture with strategic human resource management. The case study was conducted in Australian public organization over the period of the years 1998 to 2002 assessing the cultural change from the year 1995 to 2010. The study outlines the origins of the decisions on HR - practices and their implementation (Molineux 2013: 1588–1612).

The background of the study subject is that it is an Australian public agency that employs around 20,000 employees. The organization was subjected to implement a major legislative reform program by the government of Australia. The reform program would have major impact on business and society. In addition, the successful implementation was necessary for the organizational creditability and the reputation of the leaders. The implementation date was set to mid-2000, delays were not an option (Molineux 2013: 1588–1612).

The reform called for strong focus on strategic change management and the agency employed further 3500 employees to enable successful change. In addition, the leaders of the agency did not think that the existing organizational culture would support or facilitate successful implementation of the change. The leaders had a strategy meeting in 1998 where they decided to shift the culture from existing "entitlement" culture toward desired "performance" culture. Entitlement culture is defined as the type of culture where employees feel entitled to certain benefits from the organization in spite of their
performance. Performance culture is defined as type of culture where employees want to contribute their best for the organization, and are rewarded accordingly (Molineux 2013: 1588–1612).

The change of organizational culture was implemented through agency's HR functions. The list of changes is drawn on Table 7 below.

Table 7. Major changes to elements of the Agency's HR system (Molineux, 2013: 1598)

<table>
<thead>
<tr>
<th>HR systems prior to the change program</th>
<th>HR systems following the change program</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic HRM and workforce design</strong></td>
<td><strong>Strategic alignment of HR with organizational strategy</strong></td>
</tr>
<tr>
<td>• No stated people (HR) philosophy</td>
<td>• Stated people (HR) philosophy and principles</td>
</tr>
<tr>
<td>• Limited alignment of HR with organizational strategy</td>
<td>• Strategic alignment of HR with organizational strategy</td>
</tr>
<tr>
<td>• Workforce planning inconsistent, resulting in staffing fluctuations</td>
<td>• Intentional workforce design and planning for the future; strategic use of people data</td>
</tr>
<tr>
<td>• One-size fits all approach to people management practices, but with inconsistent implementation in different parts of the organization</td>
<td>• Introduction of work types with targeted and differentiated strategies in employment, development and performance</td>
</tr>
<tr>
<td><strong>Employee relations and communication</strong></td>
<td><strong>Partnership fostered with focus on commonality of interests and sharing of information; open communicating systems</strong></td>
</tr>
<tr>
<td>• Industrial relations approach based on adversarial practice, withholding information and pluralist views</td>
<td>• Quarterly &quot;dialogue days&quot; - discussions with all organizational leaders, cascaded to all staff</td>
</tr>
<tr>
<td>• Limited communication and engagement of managers and team leaders</td>
<td></td>
</tr>
<tr>
<td><strong>Performance and rewards</strong></td>
<td><strong>Line of sight from corporate plan through to team plans and individual agreements</strong></td>
</tr>
<tr>
<td>• Fragmented alignment of corporate plan to team plans and individual agreements</td>
<td>• Widespread use of performance appraisal and feedback, including 360 degree feedback</td>
</tr>
<tr>
<td>• Limited use or performance appraisal and feedback processes</td>
<td>• Mandatory use of performance agreements</td>
</tr>
<tr>
<td>• Limited use of performance agreements</td>
<td>• Behavioral statements and expectations linked to performance agreements and appraisals</td>
</tr>
<tr>
<td>• Performance not well-linked to expectations</td>
<td>• HR measures built in to overall pay outcomes</td>
</tr>
<tr>
<td><strong>Conditions and work environment</strong></td>
<td><strong>Differential conditions of employment by work type</strong></td>
</tr>
<tr>
<td>• Mostly one-size fits all conditions of employment</td>
<td>• Integrated focus on health and safety linked to wellbeing program, risk management and early return to work</td>
</tr>
<tr>
<td>• Focus on health and safety and return to work, but not integrated</td>
<td>• Strong focus on diversity, including enhancement of family-friendly working practices</td>
</tr>
<tr>
<td>• Diversity management being implemented</td>
<td></td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td><strong>Recruitment practices streamlined and focused on differentiation according to work type, employer of choice and branding focus</strong></td>
</tr>
<tr>
<td>• Slow recruitment and selection practices, inconsistent advertising</td>
<td>• Focus on talent management and retention</td>
</tr>
<tr>
<td>• Inconsistent talent management</td>
<td></td>
</tr>
</tbody>
</table>
The change model (Figure 14 on page 58) shows how systemic SHRM influences organizational culture. Systemic thinking is the starting point because it enables the understanding of: business direction, environment, business cycle and culture. In the Agency case the driving force is political and economic cycles. Systemic thinking prevents the pitfalls of "quick fixes", because it enables the leaders to understand the underlying structure, context and culture which leads to the leaders developing philosophy and design that aims for long-term fundamental solution. The four boxes in the model; HR philosophy and design, HR change strategy, HR operational changes and evaluation represent the SHRM activities. The new HR infrastructure and operations reinforce new behavior (Molineux 2013: 1588–1612).

7.12.1. Results

The researcher conducted employee interviews pre-change 1995, post-change 2003 and sustained change 09/2008. All five of the measured indicator had risen substantially. The five indicators were morale high from 20% to 80%, formal appraisal undertaken from 30% to 90%, performance agreement in place from 40% to 85%, supports organizational goals 70% to 90% and satisfaction with job from 60% to 80% (Molineux 2013: 1588–1612).

The results indicate that the implementation of the cultural change was successful. The results above indicate the SHRM actions being successful. The letter to editor and the voting for the certified agreements are indicators of cultural change. Furthermore, the structured interviews with executives, core members and project leaders indicate the extend some changes made and sustained (Molineux 2013: 1588–1612).

The changes made to the HR system resulted in cultural changes, especially the partnership approach to employee relations reduced the industrial conflict. In addition, the divi-
sion of workforce to work types, which enabled the HR professionals to focus on certain core worker also called strategic jobs. Third major change was open communication process, engaging the leaders, managers and employees of the organization. Fourth major change was the performance management process, which aligned the individual and team performance agreements to the organizational plan. In actions, it meant introducing feedback and appraisal discussion regularly as well as the additional reward and recognition program (Molineux 2013: 1588–1612).

The author concludes that most of the changes were not groundbreaking nor innovative however, they were need in 1998 in the specific agency (Molineux 2013: 1588–1612).

The most significant changes were:

- Performance agreements
- Informal feedback
- Formal appraisals
- Relationship-building approach to industrial relations
- The use of work types
- A capability framework
- Differentiated employment
- Work conditions
- Development processes for work types
- Skill and capability assessment
- Employer branding
- Electronic learning
- Open communication processes
- Dialogue days with all senior managers
- And employee well-being programs (Molineux 2013: 1588–1612).

7.12.2. Reflection

Case 12 was a longitude study of one Australian public agency forced to change their existing organizational culture to accommodate the government's decision to reform its
legislative (Molineux 2013: 1588–1612). Being unsuccessful in the implementation of the change was not an option. Moreover, the agency had the public eye on it. The agency is a larger organization with around 21,000 employees so change management is not easy. The leaders desired a change on the organizational culture from "entitlement" to "performance" culture. The culture change was designed to be carried through with changes to the strategic human resource activities.

The results were conclusive with the notion from employees, leaders, managements, and HR specialists that the changes had been successfully implemented (Molineux 2013: 1588–1612).

This research shows that with right actions and enough time, the change of organizational culture is very much possible.

Next chapter will contain the discussion and results of this thesis.

8. DISCUSSION AND RESULTS

The aim of this thesis is to establish the key points that affect the implementation of knowledge management in organizations through theory and twelve case studies. In addition, the aim was to discuss and connect the theories of knowledge management, organizational learning, organizational culture and strategic human resource management. The three other theories provide support for knowledge management especially in the point of planning implementation.
Figure 19 draws a mind map of the theories discussed in the empirical cases and how they are connected with each other. Basis of the map is organizational strategy which defines the direction, vision and mission that the organizations wants to achieve through managerial functions and organizational strategy with the support of strategic human resource management.

**Figure 18.** Mind map of the theoretical connections in proved by the empirical cases
The next three sub chapters will discuss the individual connection more closely based on the case studies.

8.1 Knowledge management and organizational culture

Organizational culture can be seen as starting point for implementation of knowledge management. First, managers need to define the existing organizational culture to be able to assess whether or not it is accommodating for implementation of knowledge management or not. They need to recognize that no organization is made up of only one type of culture but there are several cultures present at all times. Cameron and Quinn (2006: 33–54) have recognized four types of organizational culture: clan, adhocracy, hierarchy and marketing. In addition, the Denison organizational culture model present the four traits: adaptability, involvement, mission and consistency (Denison and Mishra 1995: 204–223). Case 10 (Mojibi et al. 2015: 285–287) showed by empirical results connection between all the organizational culture traits in the Denison model and knowledge management. Second, the managers need to define strategically defined goals what they want to achieve concerning the culture as well as knowledge management. Third and final aspect is time, the managers need to recognize that the change of culture as well as implementation of knowledge management takes time. Case 12 (Molineux 2013: 1588–1612) present a longitudinal study where managers were forced to change the organizational culture to able to implement other changes in the organization. The change was achieved with the aid of strategic human resource management activities (Molineux 2013: 1588–1612). One of these activities was better knowledge sharing, with open communication and dialogue possibilities for the employees with leaders and managers (Molineux 2013: 1588–1612).

Knowledge management is highly dependent on the willingness of employees in the organization to share their knowledge, especially in the case of sharing tacit knowledge. Case 11 (Danaeefard et al. 2012: 1921–1931) connects the positive cultural atmosphere to knowledge sharing activity. The researches established that bureaucratic, hierarchy
and competition cultures are most hostile culture types for knowledge management and knowledge sharing. The importance of right type of organizational culture is to guarantee that the implementation of knowledge management as well as accommodate continuous knowledge flows.

8.2 Knowledge management and organizational learning

Knowledge management and organizational learning both have the same goal in organization: lead to innovation and eventually to competitive edge (Örtenblad 2002: 213–230, Palos and Stancovici 2015: 2–22). Three of the empirical cases showed positive correlation between organizational learning and innovation organizational performance. Furthermore, as organizational learning can be seen as an effective part of knowledge management, one can conclude that the better knowledge management is implemented, the better the organizational performance.

Organizational culture has an effect on organizational learning as accommodating or non-accommodating factor, meaning that it either creates a safe and participative environment or encourages employees to see knowledge as personal possession which can guarantee them promotion and leverage in the organization (Palos and Stancovici 2016: 2–22) (case 5). Like stated before organizations with bureaucratic, hierarchical or competition culture types are not likely to enjoy full advantage of knowledge sharing, nor organizational learning.

Knowledge flows are a part of organizational learning that indicates the knowledge being transferred from the individual or group to organization or the other way (Decarolis and Deeds, 1999: 953–968). Knowledge stocks are the existing knowledge in the organization, it can be explicit or tacit, they can be organizational, group, or individual (Decarolis and Deeds, 1999: 953–968).

Organizational learning is an important part of knowledge management because it describes the activities defined in knowledge management theory. Furthermore, organizational learning leads to results in innovation as well as performance. Organizational
learning activities are managerial in knowledge management as well as human resource management.

8.3 Knowledge management and strategic human resource management

Strategic human resource management has many effects of knowledge management since information sharing and ensuring knowledge flows are mostly HR - functions along with knowledge manager. In addition, HR - professionals are responsible for recruiting, training and rewarding (Pourkiani et al. 2011: 416–420). Most of today's employees are seen as knowledge workers. The knowledge they possess in the organization forms the intellectual capital.

Tabasi et al. (2014: 170–185) (case 4) established connection between strategic human resource management and organizational learning and how the connection leads to innovation. However, the SHRM core practices needs to be first defined and then applied. SHRM functions also plays a role in knowledge acquisition and redistribution (Razouk et al. 2009: 77–82). However, Jayasignam et al. (2013: 255–264) found out in their study that the existing knowledge in the organization is more useful than new acquired trough recruitment. On the other hand, in small organization recruitment was also proved to be useful resource.

Knowledge management and strategic human resource management should be the main actors in the actions directed to implementation of knowledge management, ensuring knowledge transfer and directing the organization towards becoming learning organization.

8.4 Conclusions
The theories of knowledge management, organizational culture, organizational learning and strategic human resource management are, in fact, connected. Organizational culture forms the basis of strategically formed plans, and together with strategic human resource management activities it enables the change. Knowledge management creates the direction where the organization wants to direct itself. Organizational learning enables continuous learning and innovation.

Answers to the main research question: what needs to be taken into consideration by management in establishing knowledge management to an organization, are as follows: First, managers need to strategically define the goals which they want to achieve through implementation of knowledge management. Second, they need to do the groundwork by identifying the existing organizational culture and make sure that it is accommodating for the implementation of knowledge management, otherwise the effort will fail. Third, managers need to employ the HR-professionals to the goal of achieving organizational learning through knowledge management. Like indicated before the HR-professionals have an important strategic role in acquiring knowledge, managing knowledge sharing, so that it is done from the right flow to the right stock and rewarding accordingly. Fourth, managers need to realize that change requires time. Finally, managers need to implement knowledge management and organizational learning so that the effort is continuous, only then can the full advantage be received.

To propose further research the theories could be tested in Finnish public organization where there are mostly knowledge workers, like the police force, national pension fund or Finnvera.

LIST OF REFERENCES


