Saimaa University of Applied Sciences
Faculty of Business Administration Lappeenranta
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Benefits of Managing Organizational Capability

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Abstract

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The purpose of this study was to describe in detail the concepts of capability management and organizational capability. Capability management signifies the full utilization of capabilities in an organization, while organizational capability is the formation of individual capabilities into a larger group of capabilities which add value to organizational performance. There are numerous other elements significant to organizational development which are also related to capability management. When forming the picture of capability management, at least the elements of knowledge governance, quality management, change management, global capabilities, trust and motivation, and dynamic capabilities, such as innovation capability and renewal capability, need to be considered. It is also of great importance that a measuring element for human performance is included in the process of capability management.

Several models for capability management have been developed during the last few decades. One of the most well-known models is the People Capability Maturity Model (People CMM) designed by researchers at the Carnegie-Mellon University in 1995. The level of organizational capabilities is defined by five maturity levels and key process areas related to each maturity level. This model was originally developed for the use of software companies and is thus extremely well-suited for this bachelor's thesis, as the case company introduced in the empirical part of this thesis operates in the sector of IT services.

The current state and significance of capability management in one division of the case company is made visible through answers received from qualitative focus group interviews. The interview results confirm the multi-faceted nature of capability management. This study shows that clear and specific instructions for company procedures in capability management need to be supported by the managerial skills of communication, leadership, and performing financial results.

Keywords: capability management, organizational capability, People CMM, dynamic capabilities, human capital performance

Tiivistelmä

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Tämän opinnäytetyön tavoitteena oli kuvata yksityiskohtaisesti kyvykkyyden johtamisen ja organisatorisen kyvykkyyden käsitteitä. Kyvykkyyden johtaminen tarkoittaa organisatorisen kyvykkyyden kokonaisvaltaista hallintaa. Organisatorinen kyvykkyys taas muodostuu yksilökyvykkyyksien yhdistämisestä suuremmaksi kokonaisuudeksi, joka tuottaa organisaatiolle tuloksentekokykyä. Monet yleisesti organisaation kehittämiseen liittyvät seikat ovat myös yhteydessä kyvykkyyden johtamisprosessiin. Kyvykkyyden johtamisen kokonaisprosessin hallinta edellyttää perehtymistä myös tiedonhallintaan, laatujohtamiseen, muutosjohtamiseen, monikulttuuriseen yritysilmapiiriin, sekä erityisesti dynaamisiin kyvykkyyksiin, joita ovat esimerkiksi innovaatiokyky ja uudistumiskyky. Inhimillisen pääoman kvantitatiivisen mittaamisen ja arvottamisen pitää myös näkyä kokonaisvaltaisessa kyvykkyyden johtamisprosessissa.

Kyvykkyyden johtamisen hallintaan on viimeisten vuosikymmenten aikana rakennettu useita malleja. Yksi tunnetuimmista ja arvostetuimmista malleista on kyvykkyyden johtamismalli, People Capability Maturity Model (People CMM), jonka tutkijat rakensivat Carnegie-Mellon yliopistossa Yhdysvalloissa vuonna 1995. Organisaation kyvykkyys määritetään viiden kyvykkyystason perusteella, joihin liittyvät avainprosessialueet avustavat kyvykkyystason määrittämisessä. Malli kehitettiin alun perin hyödynnettäväksi ohjelmistoalalla, joten se soveltuu erinomaisesti kyvykkyyden johtamisen lähtökohdaksi tässä opinnäytetyössä, koska työn empiirisessä osassa esitelty yritys toimii IT-alan palvelutuottajana.

Opinnäytetyön empiriaosassa tarkastelun kohteena oli tapausyrityksen yhden osaston kyvykkyyden johtamisen nykytaso ja merkitys liiketoiminnalle. Näitä seikkoja selvitettiin laadullisella haastattelututkimuksella. Tutkimustulokset vahvistavat kyvykkyyden hallinnan monimuotoisen luonteen. Selvän ja tarkan prosessiohjeistuksen lisäksi kyvykkyyden menestyksekäs johtaminen edellyttää ylemmältä johdolta kommunikaatio-osaamista, ihmisten johtamisen taitoa sekä myös kykyä tuottaa taloudellista tulosta.

Avainsanat: kyvykkyyden johtaminen, organisatorinen kyvykkyys, People CMM, dynaamiset kyvykkyydet, inhimilliseen pääoman mittaaminen

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1 Introduction

This bachelor's thesis will focus on capability management. Capability management forms a significant research area of knowledge management today and it can be seen as part of a larger picture of strategic business management when connected to business performance.

The reason for choosing this topic for the bachelor's thesis is the author's interest in the relationship between human capital performance and financial performance in business enterprises. The writer's studies in business accounting and knowledge management have given her the idea that this connection needs further investigation in order for the connection to be made visible and measurable, though often through indirect means of measurement.

1.1 Research background and significance

The topic of this bachelor's thesis is: **Benefits of managing organizational capability**. The pace of business is constantly getting faster and shareholders expect continuously increasing profits. This obviously has an effect on how people are managed in companies and how their performance is expected to be continuously above average. The key question is how this can be accomplished by managing organizational capabilities and still maintaining the well-being of employees. It is a well-known fact that employees in the knowledge era are organizations' greatest assets, and there has been a lot of concern about decrease in motivation and job satisfaction in this fast-paced society. There is a significant amount of research showing that satisfied workers are more motivated and their productivity is higher. Thus it is extremely important to see how by using organizational capabilities in their most advantageous form all stakeholders can be kept committed and satisfied.

Human capital of a company is often associated with capabilities, i.e. knowledge, skills, experience, personal competencies, creativity, problem solving ability, and motivation that individuals working for a company possess. The problem with human capital is that companies are not in possession of it. It is always the property of an individual, who cannot be forced to share it and will take at least most of it with him/her when leaving the company. It is essential that this

challenge is taken into consideration when creating a company's strategy. The significance of human capital is especially apparent in companies dealing with information technology development. (Nordberg 2014, p. 15, 18.)

The connection between strategy, operations and measuring performance is complicated. Most often companies measure their performance based on book-keeping value where human capital is seen as a cost. Several researchers have expressed concern with the current state of performance reporting style and factual contents. It is not seen to be in line with the demands of investors and credit providers as it is clearly lacking some important elements of human capital, such as patents and brands, as well as the development of capabilities of the personnel. (Nordberg 2014, p. 19-20, 22.)

1.2 Objectives of the study

This bachelor's thesis is aimed at describing the concepts of capability management and organizational capability. These concepts have become the most important elements of organizational development in today's business environment, where the rule for survival is continuously improving and renewing performance. The purpose of this study is to show the benefits of managing organizational capability in providing added value to organizations in the form of better process management, continuous innovation and renewal, and even financial results. The benefits of capability management are shown through summarizing academic research literature in the area, and by interviewing representatives of a case company on their current capability management processes.

This bachelor's thesis is also aimed at providing research settings for another study, namely a master's thesis to be conducted as soon as this bachelor's thesis has been finished. At the master's thesis level, the results of this research study are utilized for constructing a quantitative questionnaire to be used for measuring correlations between various elements related to capability management. A future ambition is finding out whether it is possible to provide concrete indicators for the correlation between issues of individual capability and financial performance.

The idea of capability challenges traditional concepts of learning. Capability management is as interested in outcomes of learning as the process of learning itself. (Hase 2000, p. 3.) Capable people

"know how to learn, are creative, have a high degree of self-efficacy; can apply competencies in novel as well as familiar situations; and work well with others" (Hase 2000, p. 3).

Application of capability has until recently been largely about creating innovative learning experiences for people, but lately the focus has been on how human resource management and its systems can have a role in enabling utilization of capabilities in everyday work (Hase 2000, p. 3). This sets the stage for the empirical part of this research project, as the goal is to look into current capability management methods in a case company as a reference for future research emphasis.

1.3 Delimitations of the study

Based on academic research literature studied, several topics related to capability management have been chosen for closer inspection. The selection of related topics is based on elements referred to most often in the literature studied; some could argue for other necessary elements to be included in successful capability management processes as well.

This bachelor's thesis will concentrate on the current state of capability management in one business division at a case company. The aim is to provide some concrete development suggestions for the case company, certifying their relevance for wider usage, however, would necessitate a more systematic research process along with the use of quantitative research methods to support the findings from qualitative interviews.

In most case studies triangulation is preferred for providing reliability for the empirical findings. Triangulation means using multiple sources of empirical data simultaneously. For example interviewing to provide additional information to answers received by a questionnaire would be an example of triangulation. (Saunders, Lewis & Thornhill 2009, p. 146.) No triangulation methods are used

in this study, as the interview data received from the focus group interviews is the only source of empirical data used.

1.4 Research question and sub-questions

The research question for this bachelor's thesis is: **What elements need to be taken into consideration for successfully managing organizational capability?**

Sub-questions for the further clarification of the main research question are:

- What is meant by organizational capability and capability management?
- What are the benefits of developing organizational capability?
- How can human performance as a significant part of organizational capability be measured?

1.5 Research method

By studying research articles and other academic references a framework for organizational capability management will be formed. The People Capability Maturity Model developed for capability management in software companies is used for defining the current level of capability management in a case company thus setting the stage for future research on making visible the connection between capability management and financial performance.

The research will at this point be qualitative in nature. At later stages of the research project envisioned, quantitative methods will also be used, as the focus will shift to building concrete measurement indicators. At this point this will be an explanatory research. The idea is to find out the current state of capability management in a case company and use the material received from the focus group interviews as a starting point for making hypotheses on successful capability management to suit any knowledge intensive business organization.

1.5.1 Qualitative research

Qualitative research is always relational to the researcher and the researcher's interpretations. It is also challenging in the sense that it has no clear

methodologies. (Metsämuuronen 2009, p. 215-217.) Qualitative research is used mainly in human sciences where the emphasis of research is in understanding and interpreting aspects of human behavior and their consequences.

It is typical for qualitative research that the original research plan changes during the research. This is because interpretation and concept defining happen at all stages of research. Different stages of research are not usually done in a chronological order but, instead, the researcher goes through the research material several times during the research process. (Eskola & Suoranta 2008, p. 15-16.)

The target of qualitative research can be either in finding the truth about the topic under investigation or interpreting the topic. Most commonly qualitative research is based on existing theories (deductive research) but it is also possible to create new theories (inductive research) during the qualitative research process. In inductive research, gathering of empirical material and its analysis happen simultaneously. (Järvi 2014.)

The close relationship between the research and the researcher as well as the possibility for interpretations form challenges for the reliability of qualitative research. For this reason it is advisable to make the logic behind interpretation of research material transparent. It is said that qualitative research can be seen as reliable if another researcher ends up with similar results from the same research material without seeing the first research's interpretations. (Koskinen, Alasuutari & Peltonen 2005, p. 159.)

Qualitative research methods can also be used to provide better understanding for issues that cannot be presented clearly enough by using solely quantitative research methods (Eriksson & Kovalainen 2008, p. 5).

A distinction can be made with primary and secondary empirical data. Primary data is collected by the researcher himself/herself and can be in the form of interviews or observations. Secondary data is data that already exists somewhere and is only used by the researcher for his/her research purposes. Secondary data can mean textual data, such as documents, or visual elements, such as videos or television programs. (Eriksson & Kovalainen 2008, p. 77-78.)

In the empirical part of this research project primary data in the form of interviewing is used.

1.5.2 Case study as strategy for information acquisition

Case study is the most commonly used strategy for information acquisition in qualitative research (Metsämuuronen 2009, p. 224). Over 90 % of qualitative research is based on case study materials (Järvi 2014).

Case study is a research project where chosen criteria is used to investigate one or more cases with qualitative research methods. Quite often the case is an organization or part of an organization. The case can also be one process in an organization. The research question is formed based on the contents of the case. (Koskinen et al. 2005, p. 154, 159.)

It is essential that in case studies the case is constructed in such a way that it is able to provide answers to the research question(s) and thus assist in understanding the elements of the case material and solving the problems stated. This might require adjusting the original idea of the research problem as new interesting aspects might reveal themselves in the course of the research process. Dubois and Gadde (2003) argue against working with theory and case study material separately. They suggest that "theory generation and confirmation are inseparable processes and should be treated as such". (Eriksson & Kovalainen 2008, p. 115, 127.)

It is worth pointing out that statistical measures, i.e. methods of quantitative research, can also be used in qualitative research. The difference in such cases is that the data is analyzed by using qualitative analysis methods. In case study research the goal of finding out new ideas is always present. (Metsämuuronen 2009, p. 222-223.)

The method of a case study is the best suited information gathering strategy for this bachelor's thesis, as there is a need for basic understanding of capability management in business organizations. The information received from the case company focus group interviews will provide a basis for strengthening the understanding of the topic for future benefit. There has also been discussion of

the possibility of continuing the case study during the next few years. If these prospects will materialize, this case study could also become the beginning of a longitudinal study, which means repeating same observations over longer periods of time, even years or decades.

1.5.3 Interviewing as a method for gathering the empirical data

Qualitative interviews originate from the social sciences where anthropologists and sociologists have used them as a means for obtaining knowledge from their informants. What differentiates an interview from a conversation is that its structure and purpose are determined solely by the interviewer. Seven stages of an interview process can be distinguished. These are thematizing (formulating the purpose of the interview), designing, interviewing, transcribing (preparing the interview material for analysis by transforming oral speech to written text), analyzing, verifying (checking validity, reliability and generalizability of the material) and reporting. (Kvale 2007, p. 5-7, 35-36.)

Most often interviews are conducted face to face, but interviewing can also be done via telephone discussions or by the aid of teleconferencing tools, or even via email. Usually an interview means a conversation between two people, but especially in business studies, group interviews are commonly used. (Eriksson & Kovalainen 2008, p. 78.)

Issues of reliability and validity need careful consideration. Reliability is about consistency and trustworthiness of research findings, while validity refers to the question of whether a said method investigates what it is meant to investigate. Issues of reliability are most often confronted in relation to transcription and analysis of interview material. Validity is a matter of choosing amongst competing interpretations and the relative credibility of argumentation. (Kvale 2007, p. 22-23.)

There are three types of interview studies, namely positivist, emotionalist and constructionist studies, as classified by Silverman (2001) in Eriksson & Kovalainen (2008, p. 79). The classification is done based on the types of research questions presented in an interview. Positivist studies are also called naturalist or realist, and they are interested in facts, thus the majority of the

interview questions are seeking for information. Emotionalist interview studies are subjective. They are more interested in interviewees' authentic experiences. Interview questions focus on perceptions, understandings, viewpoints, and emotions. Constructionist interview research is seeking to find out how meanings are produced in interaction between the researcher and his/her interviewee. This interview type is closest to normal conversation, and the interviewer only uses his/her list of preplanned interview questions as initiators of conversation. (Eriksson & Kovalainen 2008, p. 79-80.)

Another classification of interview types is to divide them into structured, semi-structured and unstructured interviews. Qualitative interviews most often represent the type of semi-structured interviews where the researcher has a list of themes and related questions prepared for the interview but their order and significance can vary from one interview to another. (Saunders, Lewis & Thornhill 2009, p. 318-320.)

This bachelor's thesis can be seen as a positivist interview study, as the interview questions are designed for finding out the current state of affairs in the case company. It is also a semi-structured interview study as, while interview questions were prepared beforehand, they were not presented in a designed order during the interviews, and material relevant to the case study – but not included in the interview questions – was also added to the interview material to be analyzed.

The use of qualitative (non-standardized) interview techniques is justified in four instances. These are:

- *"the purpose of the research;*
- *the significance of establishing personal contact;*
- *the nature of the data collection questions;*
- *length of time required and completeness of the process"* (Saunders, Lewis & Thornhill 2009, p. 323.)

All of these instances are relevant to the research project in this bachelor's thesis.

*"Non-standardized interviews can also be conducted on a group basis. The term **focus group interview** [emphasis added] can be used when the topic of the interview is defined clearly and the focus of the interview is in interactive discussion between participants of the interview."* (Saunders, Lewis & Thornhill 2009, p. 345.)

A focus group can be defined as individuals who are selected by the researcher for a discussion on the topic of the research based on their personal experience on the matter. Conversation and interaction between the participants as well as answering the interviewer's questions are crucial elements of a successful focus group interview. (Eriksson & Kovalainen 2008, p. 173-174.)

The benefits of focus group interviews are in allowing the empowerment of the participants, since they are treated as experts on the subject matter, and in permitting the collective exploration of the topic if conducted successfully. In focus group interviews there is normally no pressure to participate. Time can be taken to ponder on issues and new views on the topic. It is due to this possibility for reflection on what other participants have contributed which makes it possible for new ideas to arise. (Eriksson & Kovalainen 2008, p. 177.)

The purpose of a focus group interview is not in reaching consensus about the subject matter, but on exploring all the possible viewpoints on the issue. The downside of focus group interviews is that they usually result in somewhat chaotic interview transcripts which are difficult to decipher. (Kvale 2007, p. 72.)

1.6   Structure of the thesis

This bachelor's thesis is divided into two parts. The first part comprises the theoretical framework of capability management. Elements related to the topic are dealt with in detail in chapter 2 and its sub-chapters. The theoretical framework of this study is based on describing what has already been accomplished in the research area. There is an in-depth description of the People Capability Maturity Model (People CMM) which was introduced originally in 1995 by the Carnegie-Mellon University. Key concepts dealt with, in addition to capability management, are elements which have a close relation to it, namely knowledge governance, quality management, change management, and global capabilities. Motivation and trust have a significant role in capability management as well. In response to the requirements of the current knowledge society, the concept of dynamic capabilities is also taken under scrutiny. The chapter concludes with a brief description of the most widely known models for human

performance measurement and assessment of their significance for the task at hand.

The second part of this bachelor's thesis describes the empirical research project carried out for this bachelor's thesis. It comprises chapter 3 and its sub-chapters. There is a brief introduction of the case company and its business idea, as well as a description of the interviewing process along with a list of interview questions. The final sub-chapter of chapter 3 explains the findings from the focus group interviews and provides some development suggestions for the benefit of the case company. Chapter 4 finalizes the thesis by providing answers to the research questions set out in the introductory chapter of this thesis. Conclusions on the entire research project are written out, as well as an estimation of research validity and reliability. Some ideas for future research are suggested as well.

2   Theoretical aspects of capability management

The theoretical framework in this thesis will be built around all the essential elements required for successfully managing organizational capability. The framework will serve as a background for understanding the bigger picture of strategic business management and how capability management fits in this picture and correlates with business performance.

The concept of capability can be defined and classified in numerous ways depending on the situation. It is possible to discuss individual capabilities, team capabilities and even collective organizational capabilities. Individual capability consists of skills and know-how of an individual, and that individual's ability to apply these skills in a manner that is beneficial to the employer. Collective organizational capability, on the other hand, is formed by capabilities of certain groups of people and the added value provided by interaction inside this group. The larger the group the more challenging it is to provide unambiguous significance to capability. (Kujansivu, Lönnqvist, Jääskeläinen & Sillanpää 2007, p. 111–112.)

Capabilities need to be utilized in order for them to be beneficial. If an individual lacks motivation, his/her professional skills might not be used to their full extent.

Quite often it is the case, however, that the full utilization of capabilities is not dependent on the individual. Employees might not be working with such tasks that exploit their capabilities to the full. Inefficient use of capability potential is essentially connected with poor competence management in a company. Systematic competence management requires both clear understanding of current capabilities as well as requirements for organizational capabilities in the future. (Kujansivu et al. 2007, p. 112-113.)

As capability development requires dealing with employees' personal characteristics, it is important and advantageous to involve employees in the process of capability development. In this way it can be made certain that the competence management system includes all the necessary elements, and on the other hand, it is also a way of acquiring employees' approval to the system. (Kujansivu et al. 2007, p. 116.)

Measuring individual and organizational capability can be carried out in numerous ways depending on for example who is carrying out the measurement process (employee himself/herself, colleagues, or superiors). One of the most common ways of measuring capabilities is to compose questionnaires which can include scalable assessments and/or qualitative descriptions. (Kujansivu et al. 2007, p. 119.)

Capability management is directly linked with a company's competitive advantage. The resource-based-view (RBV) provides tools for identifying ways in which employees can contribute to maintaining a company's competitive advantage which subsequently can become sustainable competitive advantage. The RBV theory deals with the ability of upper management to fully benefit from the company's internal resources and capabilities. RBV theory emphasizes the role of human capital in an organization as an asset, not as a cost, because of its potential in valuable capability development. (Harrison & Kessels 2004, p. 21.)

Capabilities become emergent through the integration of knowledge possessed by numerous individuals, and form a crucial part in developing organizational competencies and routines. Competences are defined as knowledge intensive and performance enhancing activities which form the core of a company's

competitive advantage. Routinization of organizational capabilities embeds capabilities into organizational memory. (Knight & Cavusgil 2004, p. 127-128.) This process can also be called organizational learning.

2.1 People Capability Maturity Model (People CMM)

In the following chapters, an in-depth explanation of the People Capabilities Maturity Model (People CMM) is provided. People CMM was designed by researchers Curtis, Hefley and Miller at the Carnegie-Mellon University in 1995, and it has since its publication attracted worldwide attention as a means of capability management. People CMM is especially well-suited as a reference for this bachelor's thesis as it was originally designed to serve software development companies. This is also the business area of the case company consulted in this thesis. There have been some revisions of the original People CMM publication but the main structures of maturity levels and key process areas have remained unchanged. An excellent in-depth analysis of the People CMM is also provided by Annukka Oiva in her doctoral dissertation (Oiva 2007).

The idea behind People Capability Maturity Model is to use available resources as effectively as possible. The main processes in People CMM capability management are:

- Evaluating how well human resources are utilized.
- Setting priorities for improving the competence of workforce.
- Integrating competence growth with process improvement.
- Establishing a culture of workforce excellence. (CMMI Institute 2014.)

According to Curtis, Hefley & Miller (1995), most improvement programs developed for software companies have neglected taking into account the people factor. They have emphasized process and/or technology, but not people. The significance of the people focus is shown below in Figure 1.
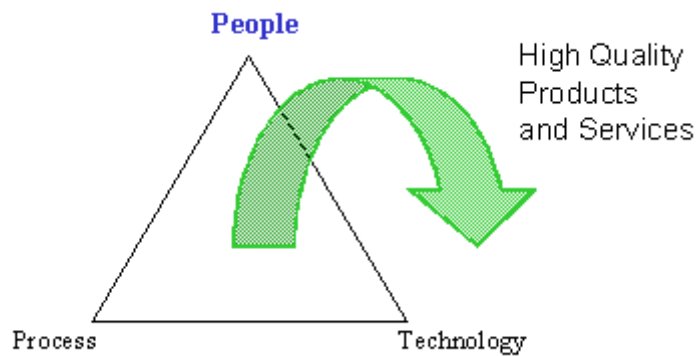
Figure 1. Three components of improvement focus (Evangelisti, Peciola & Zotti).

People CMM originated from this gap in improvement programs. It was originally designed to complement the Capability Maturity Model for Software (also designed by Carnegie-Mellon University) which assisted many software companies in making significant improvements to their productivity, quality and time to market. Many of these software companies realized, however, that making these improvements required significant changes in people management. It was to serve this cause that the People CMM was created. (Curtis, Hefley & Miller 1995, p. 3.)

The inventors of the model believe, however, that the model could be used in any organizational capability development process regardless of their business area. The People CMM Model consists of five maturity levels (Initial, Repeatable, Defined, Managed and Optimizing). The idea is to proceed from one level to another in succession by adhering to Key Process Areas defined for each maturity level. The aim is to become a mature, disciplined and continuously improving organizational entity in the development of competence and motivation of the workforce. (Curtis et al. 1995, p. xiv.)

People CMM assists organizations in selecting corresponding improvement actions based on the current maturity level. Areas of improvement actions include concrete actions in:

"work environment, communication, staffing, managing performance, training, compensation, competency development, career development, team building, and culture development". (Curtis et al. 1995, p. xiv-xv.)

"The strategic objectives of the People CMM are to[:]

- *improve the capability of software organizations by increasing the capability of their workforce*
- *ensure that software development capability is an attribute of the organization rather than of a few individuals*
- *align the motivation of individuals with that of the organization*
- *retain human assets (i.e. people with critical knowledge and skills) within the organization"* (Curtis et al. 1995, p. 4).

The maturity framework should only be applied to practices that are in directly connected to the business performance in an organization. These are the elements which can increase an organization's capabilities in providing high quality products and services to customers. Careful documentation is of enormous importance as only practices that can be repeated can also be improved. (Curtis et al. 1995, p. 8-10.)

2.1.1 People CMM Maturity Levels

Proceeding from one maturity level to another institutionalizes new capabilities in the organization. Fundamental changes are planned and carried out in how people are being managed and in the cultural conditions in which they are working. (Curtis et al. 1995, p. xv.)

In Figure 2 the process of proceeding from one maturity level to another is presented.
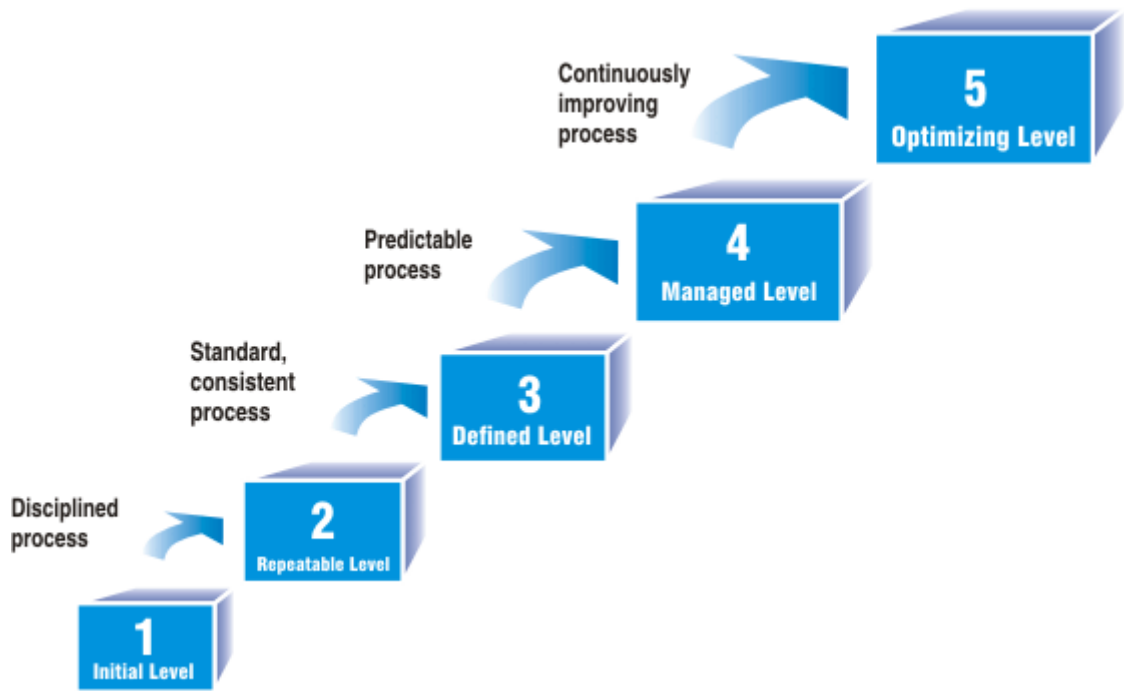
Figure 2. Five Maturity Levels of the People CMM (NetSysCon).

Level 1 – The Initial Level

A company which operates at the initial level of the maturity framework has inconsistent workforce performance activities. Some activities, such as performance appraisals, might be conducted but there is little guidance or training provided. The managers in such companies have had no training in human resource management skills and have to rely on prior experience and their personal skills of dealing with people. The actual capabilities of the workforce are unknown as they are not measured, and individuals are pursuing their own goals as there are no incentives to motivate the individuals to paying attention to the business objectives of the company. Thus the capability level in the company is not progressing, as turnover is high and time is spent on finding suitable candidates to replace those knowledgeable individuals that have left the company. (Curtis et al. 1995, p. 13-14.)

Level 2 – The Repeatable Level

The repeatable level concentrates on eliminating problems that distract employees from efficiently performing tasks assigned to them. Such problems usually include:

- *"environmental distractions*
- *unclear performance objectives*
- *lack of relevant knowledge or skill*
- *poor communication"*. (Curtis et al. 1995, p. 15-16.)

Concentration on performing basic workforce practices in a responsible and disciplined way is essential for a company to mature to the repeatable level. The process leads to these practices becoming institutionalized and thus lays a foundation for future improvement. Accepting personal responsibility for the effective implementation of all workforce practices is also characteristic for the second level of maturity. The role of executive management is committing the entire organization to continuous improvement of knowledge, skills, motivation, and performance. (Curtis et al. 1995, p. 15-16.)

Level 3 – The Defined Level

At the defined level, the organization is able to identify core competencies which are required for performing its business. Based on these core competencies adaptation of workforce practices is carried out, and best practices for performing the workforce practices are identified and implemented. A program for systematically developing these core competencies is designed, and individual career development strategies are planned to support continuous development of individual competencies. This process can further be strengthened by establishing participation in decisions regarding the ways in which work is being carried out. (Curtis et al. 1995, p. 17-18.)

Level 4 – The Managed Level

At the managed level, quantitative objectives for growth in core competencies are set thus seeking to maximize the effectiveness of team development which leads to integration of complementary knowledge and skills. In teams formed, workforce practices are tailored for each individual to support team development

and its performance. Mentoring is provided for both individuals and teams. (Curtis et al. 1995, p. 18-19.)

Level 5 – The Optimizing Level

Continuous focus on improving individual competencies and finding innovative ways of improving workforce motivation and capabilities characterize the organization's way of operating at the optimizing level. Successful innovative work methods are spread throughout the organization. (Curtis et al. 1995, p. 19-20.)

2.1.2 People CMM Key Process Areas

Key process areas at each maturity level identify a number of related activities which are aimed at achieving a set of goals seen as significant for the enhancement of workforce capabilities. These activities must become institutionalized in order to achieve the maturity level. (Curtis et al. 1995, p. 20.) Key process areas at each maturity level are shown in Figure 3 below.
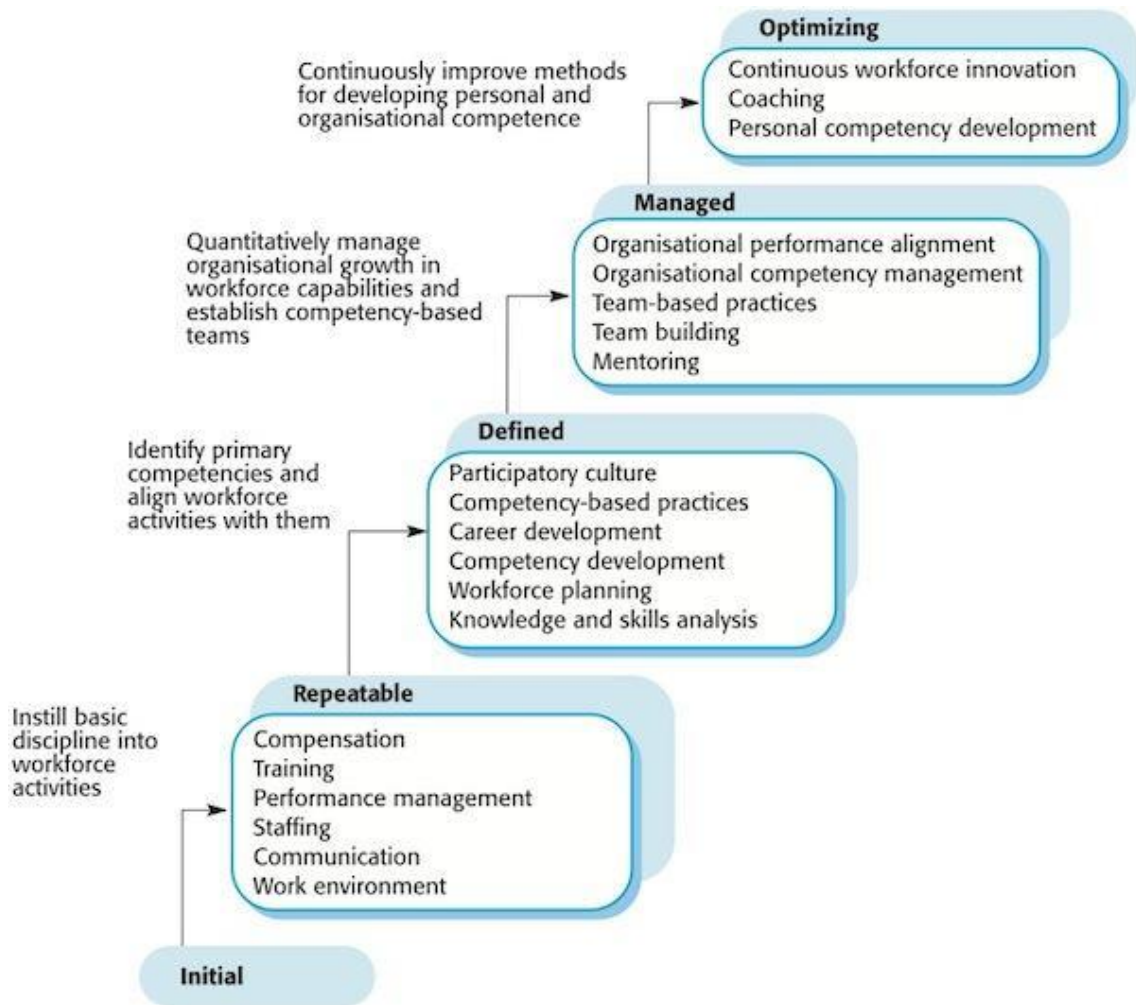
Optimizing

Continuous workforce innovation
Coaching
Personal competency development

Continuously improve methods for developing personal and organisational competence

Managed

Organisational performance alignment
Organisational competency management
Team-based practices
Team building
Mentoring

Quantitatively manage organisational growth in workforce capabilities and establish competency-based teams

Defined

Participatory culture
Competency-based practices
Career development
Competency development
Workforce planning
Knowledge and skills analysis

Identify primary competencies and align workforce activities with them

Repeatable

Compensation
Training
Performance management
Staffing
Communication
Work environment

Instill basic discipline into workforce activities

Initial

Figure 3. Key Process Areas of the People CMM (Sommerville 2008).

Key Process Areas at the Repeatable Level

Focus of key process areas at the repeatable level is on establishment of basic workforce practices and on elimination of problems related to these practices. Such practices deal with issues of work environment, communication, staffing, performance management, training, and compensation. (Curtis et al. 1995, p. 22-23.)

Key Process Areas at the Defined Level

Key process areas at the defined level address organizational issues such as knowledge and skills analysis, workforce planning, competency development, career development, and competency-based practices. In addition, a participatory culture ensures the flow of information inside the company, and

benefiting from the knowledge of individuals in decision making. (Curtis et al. 1995, p. 23-25.)

Key Process Areas at the Managed Level

Analysis of the five key process areas of mentoring, team-building, team-based practices, organizational competency management, and organizational performance alignment is crucial and highly interdependent at the managed level, as the focus is on competency-based team building and developing a quantitative understanding of knowledge and skills enhancement (Curtis et al. 1995, p. 25).

Key Process Areas at the Optimizing Level

Key process areas at the optimizing level concentrate on implementing continuous capability improvement. Practices include personal competency development, coaching, and continuous workforce innovation. (Curtis et al. 1995, p. 27-28.)

2.1.3 Applying the People CMM

An assessment based on the People CMM can be conducted by itself or together with other assessment procedures carried out in an organization. Skills expected from the person or team conducting the assessment include knowledge of such assessment processes in general, as well as involvement in People CMM -related processes. Human resources should also be included in the assessment process. (Curtis et al. 1995, p. 33-34.)

The assessment team considers the actual current workforce practices in the organization, and determines whether the implementation process of a practice has been wide enough to have become institutionalized. The assessment team also looks at items of each key process area relevant to a maturity level, and determines whether goals have been reached. Based on the assessment, a profile of strengths and weaknesses is made indicating the practices or process areas in need of further development. The current maturity level of an organization is determined by the level at which all of the key process areas for that maturity level have been successfully implemented. (Curtis et al. 1995, p. 34-35.)

2.2 Elements related to capability management

There are several issues that need to be taken into consideration alongside the actual capability management processes to achieve the best possible performance results in an organization. As Oiva (2007) points out, it is not possible to do research on capability management based solely on capabilities in organizational operations or in their management. Capabilities are not based on the effectiveness of operations or management, but on their integration and on the processes that are combined to achieve the best possible results. In practice this means that in successful management of organizational capabilities elements of strategic management, process management, quality management, competence management, and human resources management are all objects of research, and the big picture of these elements form the research area of capability management. (Oiva 2007, p. 22.)

2.2.1 Knowledge governance

The key question

"in any organization is how intelligent, adaptive effort can be mobilized by motivational and cognitive means to contribute to joint production and therefore high levels of sustained value creation" (Foss & Michailova 2009, p. 24).

The knowledge governance approach provides an attempt of systematic thinking of the bridge between knowledge and organization. Governing knowledge processes means simply choosing such governance structures and mechanisms which favorably influence processes of sharing, using and creating knowledge. Such structures and mechanisms are relevant to organizational incentives and coordination of knowledge processes. Issues of knowledge governance are addressed through micro-foundational elements, such as individual motivation, preferences, expectations, and cognitive styles, and causal processes are traced between organizational level (macro) and individual level (micro) interaction to investigate how these micro-processes have an effect on macro-level organizational knowledge-related outcomes. (Foss & Michailova 2009, p. 24.)

2.2.2 Quality management

The connection between consistent capability management (People CMM) and quality management is evident in the fact that the practices usually considered to be integral in any quality program are all elements of the People CMM framework.

"Total Quality Management (TQM) is recognised [sic] for emphasising [sic] customer needs and contributing to organisations' [sic] efficiency and effectiveness through process orientation and continuous improvement" (Steiber & Sverker 2013, p. 48).

TQM was launched in the 1980s as a new management concept that saw quality as a necessary element in all organizational processes. TQM was then seen as requiring the involvement of all employees under the supervision of the management. Towards the end of the 1990s, there was a shift of emphasis into the direction of business excellence, which lead to a more holistic view of TQM. Since the 1990s, a division into two trajectories of TQM has been apparent. The first one sees TQM as a more holistic concept and the latter as a narrower one focused on measurement and statistical methods. (Steiber & Sverker 2013, p. 48, 50, 56.)

In the 21st century, TQM has mainly been seen "as a management practice that provides an organization with better performance". The implementation of TQM practices has been shown to improve efficiency of companies, lowering costs of production, and thus improving the overall performance of companies. (Honarpour, Jusoh & Md Nor 2012, p. 23, 26.)

Akgün, Ince, Imamoglu, Keskin & Kocoglu suggest that

"TQM principles enable firms to capture, interpret, translate and deploy the knowledge, skills and attitudes of people throughout the organisation [sic] to establish a collective learning capability". (Akgün, Ince, Imamoglu, Keskin & Kocoglu 2014, p. 890).

The impact of TQM on a company's financial performance is elevated through Organizational Learning Capability (OLC) and business innovativeness. Business innovativeness refers to the creation and capture of added value through the implementation of new business practices, workplace organization, and business models which are capable of coping with changes. OLC involves

four dimensions, those of managerial commitment, systems perspective, openness and experimentation, as well as knowledge transfer and integration. (Akgün et al. 2014, p. 889-890.)

2.2.3 Change management

In today's turbulent world business operations change continuously with an increasing pace. A significant factor behind these changes is the development of technology with all the new possibilities that come alongside with such advances. Change management is a controlled process where for example organizational structures are renewed, or a new management program is being implemented. A controlled process means that it includes the elements of goal setting, planning, communication with, and adaptation of, personnel, implementation, follow up, and necessary adjustments. (Kujansivu et al. 2007, p. 144-146; see also Lönnqvist, Kianto & Sillanpää 2009.)

Most of change management literature is still based on:

"the Lewinian three-step model (Lewin 1952) where a successful change project is seen to involve three steps: unfreezing the present state of the organization, making the change, and then refreezing the organization". (Lönnqvist et al. 2009, p. 561.)

This kind of change is called episodic change, underpinning the assumption that change is always a predictable process which can be effectively planned and controlled by the management. (Lönnqvist et al. 2009, p. 561.) Weick & Quinn have introduced the sequence of freeze-rebalance-unfreeze as the model for continuous change, where change is seen as ongoing, evolving and cumulative (Weick & Quinn 1999).

Change processes usually take their toll on human resources, as they are in most cases strenuous incidents with a heavy load of planning and preparation work to be carried out. In addition, uncertainty about the continuation of employment and its meaningfulness after the change process has been implemented, as well as distrust in management capabilities of carrying out the change process, cause resistance to change and possibly even decrease in work efficiency. (Kujansivu et al. 2007, p. 147; Robbins, Judge & Campbell 2010, p. 519.) However, resistance to change can also be a positive matter. It provides predictability of

behavior without which organizational behavior would be characterized by chaotic randomness. The positive role of change resistance is also apparent in functional conflicts where it can stimulate healthy debates and thus result in adjustment of the original idea, and further, in better decisions being made. (Robbins et al. 2010, p. 519.)

Resistance to change can be overt, immediate, implicit, or deferred. Overt and immediate resistance to change is easiest to deal with by the management. Implicit resistance is more subtle. It can manifest itself by loss of loyalty to the organization, or increased number of errors or mistakes in work processes. In deferred actions of change resistance the link between the source of resistance and the reaction to it is clouded. The resistance might surface weeks, months, or even years later making it impossible to distinguish the original cause of the action. Seven tactics have been suggested by Robbins et al. in dealing with resistance to change. These are:

- education and communication
- participation
- building support and commitment
- implementing changes fairly
- manipulation and cooptation
- selecting people who accept change
- coercion. (Robbins et al. 2010, p. 519-520.)

2.2.4 Global capabilities

The global context places new pressures on the service-providing companies in the form of expatriate compensation, a trend towards sub-specialization, and challenges in keeping the most talented employees. A concept of experiential knowledge has been introduced by several researchers as a key capability for the internationalization of a company. Smart choices in locations, suppliers, partners, and information systems require experiential knowledge from someone within the company which is planning to go global. Internal systems and processes need to be developed for filtering and learning about clients, costs, and technologies essential for being successful globally. Further, effective

coordination mechanisms need to be developed for the separate national offices being able to operate as an entity. (Brock 2012, p. 1593, 1596.)

The role of social capital is extremely important in the process of internationalization of companies. Social capital is embedded in relationships (as opposed to human capital which is embedded in individuals) and carries the possibility of mitigating some negative effects of being a foreigner in unfamiliar circumstances. It takes time to learn and develop global capabilities which can be quite different from the capabilities required for being successful in home markets. (Brock 2012, p. 1603-1604.)

A new multicultural management approach is required for the creation of global organizational capabilities. There is a clear need for the management to challenge culturally bound mindsets and learn from other cultures. It is understood that all the basic competencies needed in domestic markets such as planning, organizing, leading, and controlling are relevant to international business processes as well. However, there are issues such as language barriers, differing rules and regulations concerning business conduct, political, financial and commercial risk levels, as well as numerous cultural differences which need to be taken into consideration while planning to expand internationally. (Townsend & Cairns 2003, p. 314, 317.)

There are several fundamental principles which are seen as essential for operational success. These include being objective and open-minded, tolerating ambiguity, being independent and stable, as well as being able to create a shared vision of how the business operations should be conducted. (Townsend & Cairns 2003, p. 318.)

Townsend & Cairns argue that the term competence refers only to a minimum level of performance and should be replaced by capability which they see as a more holistic concept including additional elements of values, such as trust and self-efficacy, when describing global behavior. Capability requires more adaptability and flexibility which are prerequisites in international settings. Competent managers can only complete known tasks, whereas capable

managers are able to visualize the future and work towards it confidently. (Townsend & Cairns 2003, p. 318-320.)

2.3 Role of motivation and trust in capability management

As mentioned in the beginning of chapter 2, motivation plays a strong role in capability management. In general, motivated people are more productive than unmotivated people. Motivation and issues of trust are also closely related. Thus it makes sense to investigate the role of motivation and trust in capability management.

2.3.1 Motivation

"[M]otivation is a psychological process resulting from the interaction between the individual and the environment" (Latham & Pinder 2005, p. 486).

A poor fit between job characteristics and an employee's values can result in low motivation. Thus research on organizational behavior calls for looking into the interplay between context and the individual. There have been significant discoveries in research in understanding how the connection of national culture, job characteristics, and the relationship between the context and the individual have an effect on motivation. (Latham & Pinder 2005, p. 486, 493, 507.)

Motivation can be defined "as the processes that account for an individual's intensity, direction and persistence of effort toward attaining a goal". Intensity is the most influential element of motivation. It is concerned with evaluating how hard a person strives towards a set goal. Direction of effort is consistent with the quality of aligning the motivated intensity towards the organization's goals, and persistence of effort means measuring the time taken to accomplish set goals. Persistence also means staying with a task as long as it takes to achieve it. (Robbins et al. 2010, p. 140-141.)

Even in most western countries legislation in employment law allows employers to issues what are commonly known as 'lawful and reasonable orders'. Despite this regulation it is acknowledged that controlling the behavior of other human beings can only be carried out to a certain degree. Superior work performance cannot be accomplished if workers choose not to apply their capabilities to the

full extent. Motivation cannot be controlled or commanded, and it is **motivated capability** that companies most need from individual workers. (Boxall 2011, p. 293-294.)

Companies need to offer their employees sufficient incentives for them to be willing to exchange their most valuable asset – time – for such incentives. An employee is only motivated in entering an employment relationship if the benefits of doing so can be seen as more significant than the costs. Companies which fail to offer adequate incentives, or which fail to engage in an ongoing process of incentive alignment, will fail in captivating the best possible workforce capabilities with respect to the company's requirements. Companies fail in competitive labor markets when they are not able to recruit and retain capable individuals. This might be due to a failure in meeting the income expectations, or a failure in providing sufficient possibilities for personal growth, or even a failure in being able to provide secure employment conditions. (Boxall 2011, p. 293-295.)

Motivation can be maintained for example by job rotation, job enlargement, and job enrichment. Job rotation can also be called cross-training and it means shifting periodically from one task to another. Job rotation is usually performed at the same requirement level and is used to alleviate overroutinization of work responsibilities. Job rotation can also be beneficial for the employer in the form of flexibility in work scheduling, adaptation to changes, and vacancy filling. Job enlargement was invented in the 1970s, and refers to increasing the number and variety of tasks given to an individual worker providing more diversity in the work environment. Finally, job enrichment means expanding the job description vertically. Its purpose is to increase responsibility of planning, execution, and evaluation of work tasks by the employee, and it is used to give employees more freedom and independence thus increasing their motivation in assessing and correcting their own work performance. (Robbins et al. 2010, p. 175-176.)

2.3.2 Personal and organizational (impersonal) trust

Trust can be seen to develop in three stages. At first trust can be subjective, assessing the other party's trustworthiness. Another level of trust is making the decision to actually trust someone. At this stage, the element of trustworthiness

has been established, and detrimental actions by the trusted party are considered as unlikely. The final level of trust involves risk-taking and can further be divided into two categories. The first one is called *reliance* related behavior which means for example a manager giving control over valuable decisions to the employee. The second category is *disclosure*, as in a manager sharing potentially damaging information with an employee, such as commercially significant information on a company's core competencies. (Dietz & Den Hartog 2006, p. 558-560.)

Trust can also take the forms of generalized trust in which case we can talk about organizational trust. In organizational trust, trusting the immediate supervisor is closely related to trusting the management in general. (Dietz & Den Hartog 2006, 565.) Impersonal or institutional trust deals with factors such as company vision and strategy, the management group's capabilities, the company's commercial competence, and justice and fairness of human resource management processes (Vanhala, Puumalainen & Blomqvist 2011, p. 486).

Whether employees trust the management and are committed to the company they are working for is strongly based on the employees' perceptions of fairness in the company's human relations management, and on the actual trustworthiness of people working as managers. The issue of trust is always connected with long-term loyalty. Consistency between promises and behavior is a significant factor by which trust can be improved. Managers who promote high levels of trust are better able to maintain valuable workforce capabilities. In large firms, where trust is more impersonal, it is a more fragile variable. Trust can only be maintained if values of the upper management are aligned with all levels of line and specialist managers, and are communicated consistently with concrete actions. Trust is especially at risk in mergers and acquisitions or in change processes where downsizing or outsourcing are conducted. (Boxall 2011, p. 295-297; see also Vanhala et al. 2011.)

Vanhala et al. argue that with current management challenges organizations cannot rely solely on enhancing interpersonal trust. There is a clear need for impersonal forms of trust alongside the traditional person-to-person impersonations of trust. Organizations might have more possibilities in being efficient if employees could trust an organization without personally knowing each

decision-maker and having the need to assess their trustworthiness. (Vanhala et al. 2011, p. 505.)

2.3.3 Psychological contracts

Psychological contracts can be defined as "a set of unwritten reciprocal expectations between an individual employee and the organization" (Schein 1978, p. 48) or as defined by Denise Rousseau (1995) by regarding them "as an individual's beliefs about the terms of their relationship with the organization that employs them" (Boxall & Purcell 2011, p. 19).

Psychological contracts represent one aspect of the relationship that binds an individual to an organization. It is a two-folded relationship that includes legal contracting issues such as duties and rewards, and psychological contracting issues consisting of felt and perceived expectations. The psychological contract deals with social and emotional aspects of relations between an employer and employee. (Harrison & Kessels 2004, p. 26.)

Research shows that individuals are interested in deploying their competences as effectively as possible, and are looking for the best possible match between their capabilities and the demands of the job. There is a strong thrive for expressivism which leads many employees in search for personal fulfillment from their working life. Companies should thus pay greater attention to being able to provide their employees with continuous opportunities for personal growth. (Boxall & Purcell 2011, p. 226.)

The theory of psychological contracting helps to understand the effects that behavior and promises made by the management can have on the development of employee trust over time. An organization which treats its employees in a fair manner, and delivers on its promises, usually enjoys greater loyalty from the employees. This is especially significant in companies whose employees are responsible for complex operation systems or are expected to continuously innovate in order to maintain the company's competitive advantage. (Boxall & Purcell 2011, p. 226–227.)

Currently, companies are investing less in training programs and development activities, are downsizing, and are using more temporary and contract workers. In these circumstances individuals are most likely to feel that the psychological contract between them and their employer has been violated. Individuals feel threatened by this, and experience a need to take a more active role in managing their competence development. This can have serious effects on the development of social capital in an organization, as social capital is closely related to employee commitment. Erosion of trust in the psychological contract can have dire consequences for the continuation of successful business operations. (Harrison & Kessels 2004, p. 26-27.)

2.4 What are dynamic capabilities?

It is possible to differentiate between static and dynamic intellectual capital. Static intellectual capital can be seen as individual capabilities in a company (Kujansivu et al. 2007, p. 146). Dynamic intellectual capital deals with an organization's capability of continuous innovation, and of dealing with change situations, in order to perform necessary adjustments in its business processes for staying in line with the changing business environment (Li, Chen & Huang 2006, p. 215; Kujansivu et al. 2007, p. 146). Dynamic intellectual capital can be connected with concepts of dynamic capabilities, innovation capability, and renewal capability (Kujansivu et al. 2007, p. 146). Maintaining these capabilities requires that an organization constantly recruits, organizes, motivates, and invests in highly talented individuals (Teece 2011, p. 528). The investigation into dynamic capabilities integrates research areas of intellectual property and R&D management, product and process development, technology transfer, and organizational learning (Li et al. 2006, p. 215).

The dynamic approach sees knowledge as:

"emerging from the ongoing interactions between the organisational [sic] members, and the focus is not on the intangible assets per se but on the organisational [sic] capabilities to leverage, develop and change intangible assets for value creation" (Kianto 2007, p. 344).

The decisive factor in value creation is that resources themselves are not significant but instead, how these resources are coordinated and combined for productive purposes. (Kianto 2007, p. 344, 348.)

As with capability management in general, also dynamic capabilities benefit from repetition, which is seen as an important learning mechanism. Repetition and practice help employees understand processes better and such in-depth understanding makes it possible to create effective routines. (Eisenhardt & Martin 2000, p. 1114.) Also Anand, Ward, Tatikonda & Schilling see organizational learning as a key element in producing dynamic capabilities in an organization. Operational learning can assist in selecting among alternative solutions in change situations. Balance between activities whose goal is improving current process capabilities, and such activities which are aimed at creating new processes, is a crucial element of success. (Anand, Ward, Tatikonda & Schilling 2009, p. 446-447, 452; see also Saunila 2014, p. 51.)

2.4.1 Innovation capability

As was also emphasized in the Key Process Areas of the People CMM,

"[c]ontinuous innovation is seen as one of the key elements of sustainable competitive advantage in companies, and to be able to continuously innovate companies need to change and renew their organizations parallel with operational excellence achieved by implementation and institutionalization of continuous capability development" (Steiber & Sverker 2013, p. 51).

Entrepreneurial alertness can be defined as the ability to "exhibit innovative behaviour [sic] consistently over time" (Li et al. 2006, p. 221).

Innovation capability has been defined by Lawson and Samson (2001, p. 384) in Saunila (2014):

"as the ability to continuously transform knowledge and ideas into new products, processes and systems for the benefit of the firm and its stakeholders" (Saunila 2014, p. 7).

A broader conceptualization of innovation capability is offered by Ngo & O'Cass (2013), who suggest that innovation capability is something more than just resources behind innovative behavior. (Saunila 2014, p. 7-8.)

Innovation capability can be measured by quantifying the efficiency of innovation capability exploitation. A link between performance management and innovation capability can be created by using appropriate performance measures for enhancing the effect of innovation capability on firm performance. (Saunila 2014, p. 9-10.) There is substantial evidence in research literature indicating that efforts made in managing innovation capabilities facilitate their capitalization through reduced production costs and operational flexibility. There is also a connection between quality management and business innovativeness due to emphasis on customer satisfaction in quality management. This connection

"suggests that the relationship between TQM and financial performance can be explained by incorporating the mediating role of business innovativeness". (Akgün et al. 2014, p. 891.)

Recent studies have identified seven determining factors in relation to innovation capability formation. These are:

- participatory leadership culture
- ideation and organizing structures
- work climate and well-being
- know-how development
- regeneration
- exploiting external knowledge
- individual employee activity (Saunila 2014, p. 46.)

2.4.2 Renewal capability

According to the knowledge management perspective, organizational renewal capability is seen as the capacity for flexible knowledge creation and integration. The strategic management perspective frames renewal capability as a dynamic capability of organizations. The intellectual capital perspective comprehends renewal capability as being a dynamic dimension of intellectual capital consisting of maintaining, modifying, and creating knowledge assets. All these perspectives assist in making sense of the concept as a whole. (Pöyhönen 2004, Abstract.)

Renewal capability is about continually replicating, adapting, developing, and changing company assets, capabilities and strategies. High renewal capability

enables a company not just keeping up with changes in its environment, but becoming a forerunner in its business area thus being able to change the rules of the markets. (Pöyhönen 2004, Abstract.)

A distinction between dynamic capabilities and renewal capabilities is that renewal capability is always a higher-order capability, meaning that it is concerned with organizational change processes in general, not just any specific functions or operations. Another distinction between the two is that dynamic capabilities emphasize the role of upper management, while with renewal capabilities, the role of middle management as well as employees is seen as more significant. It can also be argued that managing renewal capability requires creating a strategically wise balance between different renewal types. (Pöyhönen 2004, p. 89, 94-96.)

So far, attempts at measuring organizational renewal capability have been scarce. Emphasis has been on qualitative case studies which, while rich in description of renewing organizations, provide little development in being able to quantify renewal capability. Quantitative measures would greatly assist in communicating, comparing, and benchmarking knowledge-related capabilities in organizations. As renewal processes are the creation of social processes, their measurement should also be able of acknowledging the importance of social interaction by the members in an organization. Currently existing measurement methods concentrate on assessing average skills of an individual employee, and offer little help in finding out the ways in which mastering change and renewal can be spread throughout the organization. (Pöyhönen 2004, p. 114-117.)

Based on the above, Pöyhönen makes the following arguments about renewal capabilities.

1. They are based on an organization's ability to deal with information, knowledge and innovation.
2. They can be operationalized for creating different knowledge environments.
3. They should be measured in a relevant manner. (Pöyhönen 2004, 124.)

2.4.3 From People CMM to strategic management of capabilities

The aim of Annukka Oiva's research project and subsequent doctoral dissertation was testing the applicability of the People CMM in the 21st century. She set out to find out if the model was still meeting the requirements for efficient capability management. Based on her investigation, the model was found to be insufficient and in need of an extension into a strategy-focused capability management model. (Oiva 2007.) The main results of Oiva's research are presented in this chapter.

Oiva has found several limitations in the People CMM. A general observation is that the People CMM uses an on/off -evaluation scale meaning that a good practice either is, or is not, implemented comprehensively in an organization. This is justified in the model by claiming that only comprehensively implemented practices are able to build capabilities which, as Oiva claims, leaves many elements of managerial capability practices outside of evaluation. (Oiva 2007, p. 113.)

Further, the People CMM defines capabilities solely as an integration of intellectual capital which is able to increase value and productivity of human capital, but is not necessarily beneficial to organizational capabilities. The People CMM does not take into account the industry's development and pace of change, which leads to the conclusion that its implementation does not necessary guarantee increase of even individual capabilities faster than that of competitors. (Oiva 2007, p. 115.)

Even though the People CMM emphasizes the significance of anticipating strategic goal realization at the managed level, it has become evident that if human resources management is not conducted in accordance with other relevant organizational factors, it can at best lead only to efficient strategic management of personnel matters, not effective strategic management of organizational activities as an entity. (Oiva 2007, p. 117.)

It has thus become evident, as Oiva claims, that the People CMM does not pay attention to strategic capabilities. It follows that it is not able to set targets for organizational learning or endurance with respect to the industry in which an

organization is operating. However, many organizational representatives interviewed for Oiva's doctoral dissertation still preferred using the People CMM, as it was seen as a practical, comprehensive and logical construction which is able to show hierarchical levels of capabilities, and indicate both the strengths and development needs of an organizational management system. (Oiva 2007, p. 115-116.)

As the People CMM is not capable of accomplishing core demands for strategic management of capabilities, it follows that the model needs to be enlarged in three ways which take into account those core demands.

1. Strategic and operational learning and management processes need to be connected.
2. Capabilities and the integration of tangible and intangible assets are defined as the starting points of the process.
3. Development dynamics of capabilities essential for the line of business are taken into consideration. (Oiva 2007, p. 122-123.)

In summary, the framework for strategic management of capabilities should include at least the principles listed below. The framework:

- is based on the idea that capabilities are descriptive of a company's core competences
- supports a strategy of endurance
- connects the company's line of business, strategic management, and capability management
- supports defining and managing strategic capabilities in such a manner that the organization is able to maintain its competitiveness
- offers a path for elevating capabilities from one hierarchical level to another
- ensures that the company's infrastructure, processes, systems and technologies form a consistent entity
- offers global management practices
- ensures the strategic preparedness of the company

- should be practical enough to be able to assist operational management as well. (Oiva 2007, p. 84-86.)

2.5 The challenge of measuring human performance

Several academic researchers define measuring performance as a means of quantifying efficiency and effectiveness of action, but performance measurement can also be understood as both quantitative methods and assessment-based qualitative aspects of organizational actions; as measures that deal directly with human capital are undeniably non-financial in nature (Pöyhönen 2004, p. 104; Saunila 2014, p. 9). Performance management has a close affiliation with capability management and can be seen as "a philosophy which is supported by performance measurement" (Saunila 2014, p. 10).

As a response to criticism that human capital cannot be measured, several indicators for measuring it have been developed during the last few decades. Measurement indicators are concrete tools for the company management. Complicated entities can be managed by presenting their results in the form of indicators. A traditional use of indicators is controlling how successfully planned issues are being carried out in practice. Indicators can also be used to concretize strategy into goals, and for communicating these goals to employees for the purpose of guiding their attention to strategically relevant tasks. (Kujansivu et al. 2007, p. 159-160.)

Measuring the value of human capital and its performance is still a challenge. There is a lack of uniform scales or criteria making most of the indicators method-specific and/or company-specific. (Nordberg 2014, p. 47-48.) In the following chapters, brief introductions of the most successful and commonly known attempts at measuring intangible assets are provided along with assessments on their utility in capability management.

2.5.1 Balanced Scorecard

The Balanced Scorecard is probably the best known attempt at measuring human capital performance. Robert S. Kaplan and David P. Norton published an article in 1992 describing the concept of a balanced scorecard, i.e. a strategic

performance management tool which consists of four perspectives: financial, customer, internal business processes, and learning and growth; the purpose of which is controlling and monitoring employee activities. Several indicators are provided for each perspective for the purpose of comparing accomplishments to goals set in each area. The perspectives are further developed by a strategic management process which in turn is formed by four sub-processes: translating the vision, communication and linking the vision, business planning, and feedback and learning. Assisted by these sub-processes a company should be able to improve all of the indicators in a balanced manner in order to maximize its financial performance. (Kujansivu et al. 2007, p. 153.) The concept of the balanced scorecard is visualized below in Figure 4.
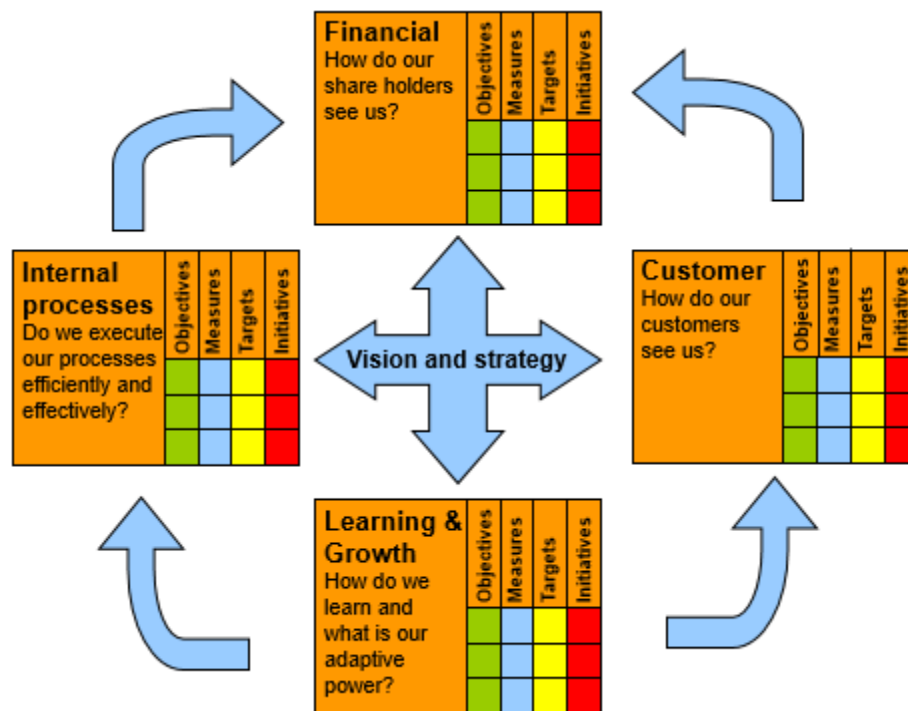

Figure 4. The four connected perspectives of the Balanced Scorecard (Passioned Group).

Kaplan and Norton see as one of the greatest benefits of the balanced scorecard its ability of signaling to both shareholders and customers what the organization is trying to achieve. They go on stating that

"[s]trategic learning consists of gathering feedback, testing the hypothesis on which strategy was based, and making the necessary adjustments". (Kaplan & Norton 1996, p. 80, 84.)

40

2.5.2 Human Resource Accounting

One of the first researchers claiming that employees are worth more to a company than their wages was Eric Flamholtz in 1974. He set the stage for measuring human capital performance. Human Resource Accounting is about identifying and reporting investments made in a company in its human resources. This identification and documentation can assist in determining the value of such assets in a way that is not possible with conventional accounting methods. (Nordberg 2014, p. 28.)

According to Flamholtz, Bullen and Hua, the greatest significance of human resource accounting (HRA) is that it is a powerful managerial tool for decision-making. The HRA framework has three major functions:

1. *"providing numerical information about the cost and value of people as organizational resources;*
2. *serving as an analytical framework about the cost and value of people as organizational resources;*
3. *motivating decision-makers to adopt a human resource perspective".* (Flamholtz, Bullen & Hua 2002, p. 947-948.)

2.5.3 Skandia Navigator

The model of the Skandia Navigator was designed by Leif Edvinsson in 1997. Skandia Navigator is based on five focus areas related to customers, processes, human assets, renewal and development, and finances. The relations between the focus areas are shown in Figure 5 below.
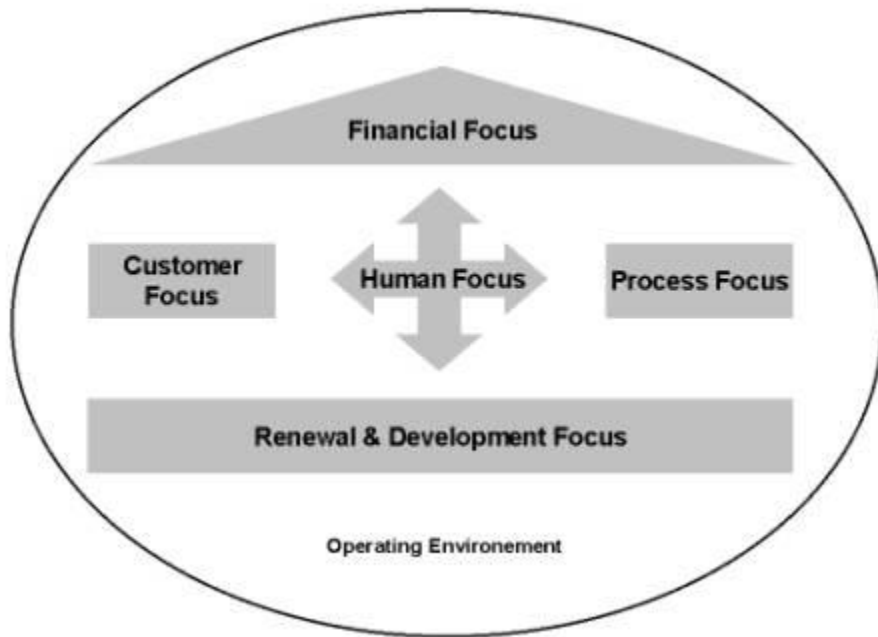
Figure 5. The Skandia Navigator (Daum 2001).

Skandia Navigator aims at producing a balanced picture of the relationship between a company's intellectual capital and financial results. One of its greatest merits is that it produces a management process which can be used developing and estimating the value of intellectual capital in the future. (Nordberg 2014, p. 40-41.)

2.5.4 Intangible Assets Monitor

The Intangible Assets Monitor was developed by Karl-Erik Sveiby. It provides a method for measuring intangible assets in a set presentation format. All forms of assets, both tangible and intangible, are measured with the same four indicators of growth, renewal, efficiency, and stability/risk. For the framework to produce valuable results it needs benchmarking information from a similar enterprise and at least some historical data. (Nordberg 2014, p. 41.) The structure of the Intangible Assets Monitor can be seen in Figure 6.
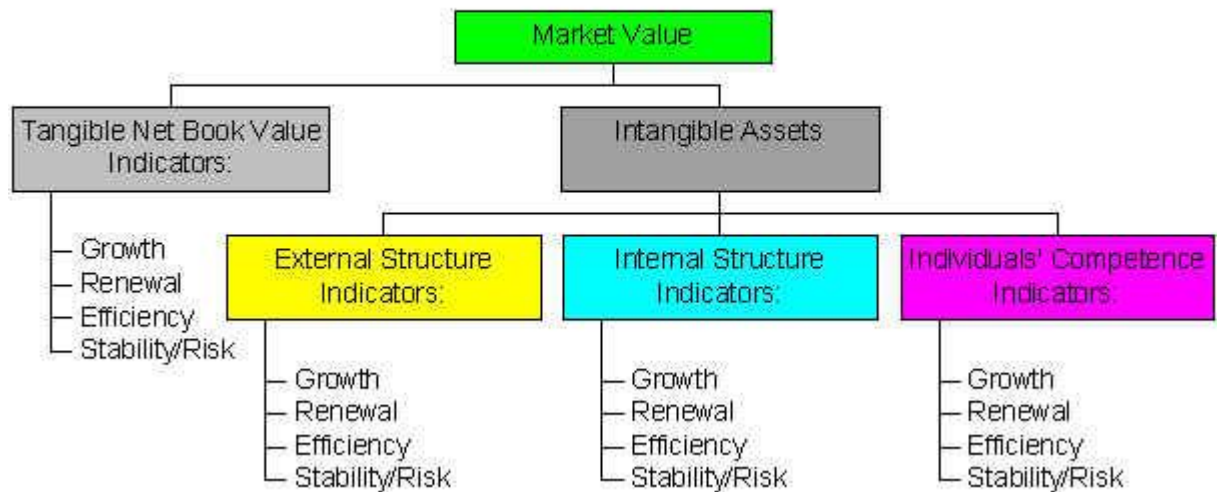
Figure 6. The Intangible Assets Monitor (Sveiby 1998).

2.5.5 Intellectual Capital Statement

"The first steps towards developing an intellectual capital statement were taken in mid1997. It was then seen as an alternative to the traditional annual report." (Mouritsen, Larsen, Bukh & Johansen 2001, p. 370.)

The Intellectual Capital Statement is a mixture of strategy, management and reporting. It includes statements or stories about the company, concrete indicators for reporting company actions, and visualizations for the future prospects. By reporting on the implementation of knowledge management activities it is also possible to get insight into the practices of developing the company's resources. Thus the usefulness of an intellectual capital statement is in showing what are the activities needed to be put in place for enhancing the company's knowledge resources. (Mouritsen et al. 2001, p. 370-371, 378-380.) The role of Intellectual Capital Statements is providing various kinds of information on company actions to all significant stakeholders. (Ahonen 1998, p. 39.)

2.5.6 Human Capital ROI

Human capital effectiveness is a construct comprising of four measures, those of revenue factor, expense factor, income factor, and Human Capital ROI (Return on Investment). The revenue factor can be calculated by dividing total revenue

by total headcount of employees, the expense factor can be calculated by dividing total operating expenses by total headcount of employees, the income factor can be calculated by dividing total operating income by total headcount of employees, and finally, the formula for Human Capital ROI is simply:

$$HC\ ROI = \frac{\big(revenue - (expenses - compensation)\big)}{compensation}$$

(Bontis & Fitz-enz 2002, p. 230.)

Technically speaking, Human Capital ROI is not a model for measuring the value of intangible assets. It is just a concept used for calculating the actual return on investment on a company's workforce. (Nordberg 2014, p. 45.) In other words it is equivalent to calculating how much value added has been received of investments made in a company's human assets. (Bontis & Fitz-enz 2002, p. 230.)

3 Process of the empirical research

The main purpose of the empirical research conducted in this bachelor's thesis was to find out how capability management is seen in a case company. What are its manifestations in everyday operations, and how are elements related to it managed. A representative of the case company was contacted, and with her assistance the settings for the interview process were arranged. It was agreed upon from the beginning that all interview materials remain strictly confidential, as answers might impart some elements of the company's sustainable competitive advantage which cannot be revealed to the public. Contents of this empirical part of the bachelor's thesis are written in such a manner that identification of the company is not possible.

3.1 Case company

As already stated above, based on confidentiality, only certain characteristics describing the case company can be revealed. The company in question is a Finnish multidivisional and multinational IT service company. It operates in more than ten countries worldwide and employs close to 15 000 employees. The head

office of the company is located in Helsinki and the working language is English. The actual interviewing process was targeted to one of divisions of the company, in charge of providing added value to the customer.

3.2   Interview method and interview questions

Focus group interviews were chosen as the interviewing method for this bachelor's thesis for several reasons. First, it was necessary that persons being interviewed had prior knowledge on capability management; second, that they held such positions in the case company that evaluating the process of capability management in their division was possible; and third, that their positions in the company enabled them to assess their capability management process with respect to that of their competitors.

Two focus groups were formed. One consisted of specialists and another of representatives of the upper management. Both focus group interviews were scheduled for November-December 2014, after the first draft of the theoretical framework had been composed. A list of tentative questions was written out and sent to the interviewees prior to the actual interviews taking place. Interviewees were also encouraged to add elements to the list of questions if deemed significant. The original list of questions was as follows:

1. Please describe the organizational structure of your division.
2. What is the management style in your division?
3. Is appreciation of personal competence evident in everyday operations?
4. At what level of the People CMM do you see your division currently?
5. What are your division's methods for measuring organizational capability?
6. How are the results utilized?
7. How does your division develop perceived organizational capabilities?
8. Do employees have a say in their personal capability development?
9. How does your division organize training? What kind of training is offered?
10. Can an employee express a wish for certain type of training? Does your division support personal training wishes?

11. What kind of incentives are used in your division?

12. How would you describe the role of trust in your division?

13. Is it possible to motivate employees? How?

14. How significant in your opinion is to consider capabilities in connection with organizational development issues?

15. What is the role of capabilities in your division's strategy development?

16. What is the significance of capability management in relation to financial performance in your division?

17. Does capability management have a connection with innovativeness?

18. What is the connection between efficient capability management and organizational renewal?

19. How significant is the role of change management in your division?

20. Does your division consider capability issues in the recruitment process?

21. How does your division consider capability issues if you have to reduce the number of employees?

22. How do you see the future of capability management in your division?

The interviews were held as scheduled. One interview was held in person and another via email. In the email interview, the interviewees first answered the questions as a group, and the interviewer was then given the opportunity to clarify issues or ask further questions after having seen the first set of answers. The interview held in person was also recorded. The answers to the questions were combined into a single document for the purpose of analysis. Additional information received during the interviews was added to the end of the document to be analyzed. The following chapter lists and describes the most important and interesting findings from the interview material.

3.3 Empirical findings from the focus group interviews

Analyzing the interview material revealed several areas of emphasis and agreement between the two focus groups. These items are discussed below along with some development suggestions.

It was pointed out by both focus groups that there are two levels of process descriptions provided for capability management, one for the company-level and

another for the divisional-level. The purpose of these descriptions is above all highlighting the importance of team-based capability development and sharing of best practices. An Overall Performance Evaluation (OPE) is conducted yearly for each employee. Based on OPE guidelines, competence profiles are created, and personal goals are set to be monitored on a yearly basis. The division employs a Competence Manager who is in charge of capability management and development. Some cultural differences in capability management were seen as a challenge for uniform conduct.

A company-specific performance management process, as well as a reward and incentive system, have been designed to be followed at each divisional level. As part of the performance management process job coding has been constructed. It is "a method to classify and benchmark positions and career levels systematically throughout the company" (Focus group 2). Both processes can be altered, however, if deemed necessary. The focus groups did not see any benefits in developing their own divisional monitoring processes either for performance management or for the system of rewards and incentives.

Rewarding is divided into five sub-processes:

- *"Annual salary revision*
- *Off-cycle salary increase*
- *Short-term incentives*
- *Long-term incentives*
- *Project rewards"* (Focus group 2).

Competence Manager is also responsible for designing and arranging comprehensive training programs related to strategy. Other training opportunities are considered individually, and have to be first discussed with team leaders on an annual basis. On agreement, four working hours can weekly be spent in personal skill development if the training is seen as beneficial for performance improvement by a superior. It was pointed out that here, again, cultural differences emerge. Employees in some countries are much more active in skill development than others.

Neither focus group questioned the role of trust and motivation. It was seen as self-evident that specialists take care of their duties and are motivated in doing

so. According to Focus group 1, there are no free-riders, everyone gets along, and individual skills are appreciated.

Organizational development takes place by participating in actual work processes, and is strongly enhanced by organizational learning efforts. Benefiting from capability development at team-level was seen as a crucial factor for future success. Dynamic capabilities of innovativeness and renewal capability did not result in lively conversation, but both focus groups considered change management as a continuous and holistic process which places various demands for managerial skills.

Recruiting plays a significant role in capability development, and has to be seen also as a factor in guaranteeing the company's financial success. A personal capability in continuous competence and skill development was seen as a more significant factor in the recruitment process than current competencies and skills of an applicant. Capability in producing financial results is even more significant in economically challenging times, when it might be necessary to downsize the number of employees. Financial performance must always be a top priority for the company.

With regard to the future of the division and the entire company, the distribution of tasks must be based on individual core capabilities even more strongly than is being done currently. Individuals sharing similar capabilities need to be combined into teams across national borders in order for operations to continue being successful around the world.

Based on analyzing the interview materials, some development suggestions arose as well. The first one is considering a positive 360-degree evaluation process. Especially in the specialist focus group, some perceptive analysis on individual managers' strengths and skills were pointed out which are currently not benefited from. A systematic all-around evaluation process might reveal these hidden talents and make them the knowledge capital of the entire company.

Another development suggestions is that despite evidently well thought-out process descriptions, there seems to be some confusion as to their systematic application. A stronger emphasis on communicating their contents to all

employees might be beneficial for feelings of trust to strengthen, as well as for motivating the personnel for continuous improvement of their job performance.

4 Summary and discussion

Capability management is a multi-faceted phenomenon, much more so than would appear at first glance. Elements related to capability management cover a wide array of concerns with respect to organizational development in general. Huge expectations are placed on company upper management in tackling all these elements successfully. Connecting capability management and human performance measurement provides challenges for successful capability development projects. Even though many attempts at measuring human capital performance have been made, none of the models designed have managed to fulfill all expectations placed on them.

The main research question for this bachelor's thesis was aimed at finding out what elements are needed for successful management of organizational capability. Based on academic literature reviewed, such elements include at least knowledge governance, quality management, change management, global capabilities, trust and motivation, and dynamic capabilities. A measuring element must unarguably also be included in the process. Some would probably argue for an even longer list of elements. The main idea behind capability management, however, is creating a holistic understanding of relevant organizational capabilities for the benefit of the company's competitive advantage. A continuous cycle of capability identification, development and assessment is essential for future success.

The first sub-question sought for definitions for the concepts of organizational capability and capability management. To summarize these concepts, organizational capability is the formation of individual capabilities into a larger cohesive group, and the added value received from operating as such an entity. Capability management means the full utilization of current capabilities, as well as continuous capability development in order to meet operational requirements for company success.

The second sub-question searched for the benefits of developing organizational capability. In today's knowledge society, innovation and renewal are at the heart of organizational development, and continuous development is expected of each and every organization for maintaining their competitive advantage and for securing their future success. The solution for required continuity comes with continuous capability development. Another benefit of capability development is making visible the totality of strengths and weaknesses of organizational competence. This image is needed for the process of distinguishing developmental requirements.

And finally, as an answer to the last sub-question of how human performance can be measured, it is evident that several attempts at quantifying human performance have been made during the last decades. All of the models created can be seen as beneficial in some areas, while lacking in others. Daniel Andriessen makes an extensive investigation into the challenge of measuring human performance in his book Making Sense of Intellectual Capital (2004), for those interested in the subject.

People CMM was found to be a useful tool for capability management, especially in software companies. Unfortunately it has not been able to keep up with all the elements required for successful companies today, and is currently lacking definitions for certain areas of capability management, especially those of dynamic capabilities, with emphasis on innovation capability and renewal capability. Interpreting the actual level of capability performance can also be challenging, as Oiva (2007) points out. There is discrepancy in defining when a process has reached an institutionalized state in such depth and width that it can be considered as an organizational capability. This became apparent also in the focus group interviews of this study, as some disagreement on the actual maturity level in the case company could be detected. To summarize, it could be claimed that a somewhat in-depth general knowledge of capability management is expected for the full utilization of the People CMM.

Capability management in the case company is estimated to be goal-oriented and well documented. Based on the focus group interviews, all elements seen as essential in capability management as indicated in the academic literature, are

seen as significant by both focus groups as well. Some development ideas are introduced for the benefit of the management in the case company. These include conducting a positive 360-degree evaluation of organizational capabilities for the purpose of finding hidden talents, and placing more emphasis on decisive communication to the employees on the processes related to capability management, and their defining factors.

4.1 Estimation of research validity and reliability

Research validity and reliability are the prerequisites of all academic research, as explained in the introductory chapter of this thesis. The validity of the empirical research process carried out in this bachelor's thesis leans heavily on previous academic writings, and can thus be seen at an acceptable level. The reliability of the empirical research process, however, is only valid with regard to the level and significance of capability management in the case company. The author of this thesis is sufficiently convinced of the relevance of her research to continue building her future research with the aid of these findings. The research process has also resulted in enlarging her understanding of all the elements related to capability management and thus provide solid grounds for further investigation into the topic.

4.2 Recommendations for future research

Some recommendations for future research in the area of capability management have also emerged during the research process. A comparison between the case company divisions would provide concrete results which could be measured and compared for future benefit. There are also several topics under the umbrella of capability management which could be looked into with more depth and detail. More widely, correlations analysis of the dependencies between various elements of capability management would be a step toward developing indicators for measuring how operational decisions in capability management affect financial performance in business enterprises.

Figures

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