



TAMPERE UNIVERSITY OF TECHNOLOGY

EDDA NÖMMELA

**ANALYSIS AND DEVELOPMENT OF A BUSINESS CHANGE
MANAGEMENT MODEL INTO A DEPLOYABLE PRODUCT**

Master of Science Thesis

Prof. Samuli Pekkola and lecturer Pasi Virtanen have been appointed as the examiners at the Council Meeting of the Faculty of Business and Technology Management on June 4th, 2014.

ABSTRACT

TAMPERE UNIVERSITY OF TECHNOLOGY

Master's Degree Programme in Information and Knowledge Management

NÖMMELA, EDDA: Analysis and Development of a Business Change Management Model into a Deployable Product

Master of Science Thesis, 80 pages, 3 appendices (5 pages)

November 2014

Major: Business Information Management

Examiners: Professor Samuli Pekkola and lecturer Pasi Virtanen

Keywords: Business Change Management, Business Change Management Model, IT Project Management, Organizational Change

In order to stay competitive, companies need to proactively respond to and manage the changes in their dynamic business environment. The aim of this thesis is to create a business change management model that facilitates the deployment of changes in project form. The model has to be applicable to the IT project management methods, practices and project culture of the target organization.

This study is conducted as a qualitative case study, and it is divided into theoretical and empirical parts. In the theoretical part, several business change management models are presented and theories on change management are studied from various perspectives. These theories are then combined with the theories of IT project management to form an organization specific business change management model for IT project purposes. In the empirical part, findings from semi-structured interviews, participant observation and document analysis are summarized and analyzed to create the activities and tools of the business change management model. The findings are also used to adjust the model to better suit the IT project management reality in the target organization.

As the main contribution of this thesis, a holistic business change management model for IT project management purposes was developed. The model is integrated into the project management methodology of the target organization. It consists of four phases, which all contain a specific set of activities and tools to help the project managers in facilitating the change their IT project introduces to the organization.

FOREWORD

Writing a thesis is a rather lonely learning process, however there are several people that made this seem more like a team effort.

First of all I would like to thank Virpi Ruoti, who introduced me to this topic and gave me the opportunity to write my thesis about it. I am very thankful for the instructions and guidance she gave me during these past 6 months. A big and warm thank you goes to Outi Tepsell, Kirsi Fröberg and Hannele Tuomala, who shared their knowledge and expertise about BCM and gave me valuable feedback when it was needed. These women are always smiling and they possess an amazing power to transfer this smile to others around them. I would also like to thank everyone else in Virpi's team for welcoming me to the team and making me feel part of the organization.

In the end, the writing part caused me much more problems than completing the actual work. Therefore, I would like to say a big thank you to Professor Samuli Pekkola and lecturer Pasi Virtanen who guided me through the writing process. I am very grateful for all the feedback, tips and suggestions you gave me in the last half a year.

A great thanks to my parents, who have let me freely choose my path and supported me in everything for the past 24 years.

Last, but definitely not the least, my biggest thanks go to Christophe. Thank you for reading the thesis over and over again. Thank you for kicking my ass on a regular basis. Thank you for your support, understanding and believing in me. Most importantly, thank you for being there for me.

Helsinki, 23.11.2014

Edda Nömmela

TABLE OF CONTENTS

| | |
|---|------------|
| ABSTRACT | i |
| FOREWORD | ii |
| TABLE OF CONTENTS..... | iii |
| ABBREVIATIONS | vi |
| 1. INTRODUCTION..... | 1 |
| 1.1. Target organization and research objective | 2 |
| 1.1.1. Research objective | 4 |
| 1.1.2. Scope and limitations | 5 |
| 1.2. Methodology..... | 7 |
| 1.2.1. Research philosophy and nature | 8 |
| 1.2.2. Research approach and strategy..... | 9 |
| 1.3. Structure of the thesis..... | 10 |
| 2. BUSINESS CHANGE MANAGEMENT | 12 |
| 2.1. Dimensions of change | 13 |
| 2.1.1. The scope of change | 14 |
| 2.1.2. The nature of change | 14 |
| 2.1.3. The intensity of change | 15 |
| 2.2. Managing change | 15 |
| 2.2.1. Success factors of business change management..... | 18 |
| 2.2.2. Managing the resistance to change | 22 |
| 2.3. Change management models..... | 24 |

| | |
|---|-----------|
| 2.3.1. Step models..... | 26 |
| 2.3.2. Emergent models | 29 |
| 2.4. Summary | 31 |
| 3. IT PROJECT MANAGEMENT | 33 |
| 3.1. What is IT project management | 33 |
| 3.1.1. IT projects as vehicles of change | 35 |
| 3.1.2. Waterfall project management..... | 37 |
| 3.1.3. Agile project management..... | 39 |
| 3.2. Common causes of IT project failures | 42 |
| 3.3. Summary | 46 |
| 4. DATA COLLECTION AND ANALYSIS..... | 48 |
| 4.1. Semi-structured interviews | 48 |
| 4.2. Participant observation | 50 |
| 4.3. Document analysis | 52 |
| 4.4. Analysis of the collected data | 52 |
| 5. EMPIRICAL FINDINGS | 53 |
| 5.1. IT project management practices..... | 53 |
| 5.2. Evaluation of the old BCM practices and templates..... | 55 |
| 5.3. Obstacles for BCM..... | 56 |
| 5.4. Expectations and needs | 58 |
| 6. THE DEVELOPED BCM MODEL..... | 61 |
| 6.1. Developing the BCM model | 61 |
| 6.2. Phases of the BCM model | 63 |
| 6.2.1. Understand and prepare..... | 63 |

| | |
|---|-----------|
| 6.2.2. Plan | 64 |
| 6.2.3. Change and execute | 64 |
| 6.2.4. Finalize | 65 |
| 7. DISCUSSION | 66 |
| 7.1. Discussing the developed BCM model | 66 |
| 7.2. Recommendations for the target organization | 69 |
| 7.3. Answering the research question..... | 70 |
| 7.4. Critique | 72 |
| 8. CONCLUSIONS | 74 |
| BIBLIOGRAPHY | 77 |
| APPENDIX 1: INTERVIEW QUESTIONS - FINNISH..... | 81 |
| APPENDIX 2: INTERVIEW QUESTIONS - TRANSLATED | 83 |
| APPENDIX 3: THE BCM MODEL | 85 |

ABBREVIATIONS

| | |
|-----------|--|
| BCM | Business Change Management: the application of a structured process and a set of tools for leading the people side of change (as opposed to the technical side) to achieve a desired outcome (Prosci 2014). |
| BCM model | An integrated approach for managing organizational change, consisting of multiple concrete supporting tools (Hughes 2007, p. 40). |
| BCM tool | A fairly simple stand-alone application (e.g. an Excel sheet, training material or a feedback form) for managing organizational change. BCM tool is usually part of a BCM model. (Dale et al. 2013, p. 562.) |
| Key users | Concept used in IT and software projects. Key users are employees who perform multiple roles at the same time and are responsible for the learning of their teams. They will use the system on daily basis and solve functional user problems. (Galoppin & Gaems, 2007, p. 214.) |
| PM | Project Management: “the application of knowledge, skills and techniques to execute projects effectively and efficiently.” (Project Management Institute 2014.) |
| Program | A project can be divided further into smaller projects creating a program. Thus, a program is a collection of inter-dependent projects, managed in a coordinated manner. (Harrington et al. 2000, p. 313; Young 2013, p. 15.) |

1. INTRODUCTION

Organizations are dynamic, complex, and open systems consisting of various technical, human and procedural parts, tied together by complicated relationships (Salminen 2000, pp. 41-42). Present-day enterprises and other organizations need to adapt to an environment full of continuous and ever-increasing change (Paton & McCalman 2000; Curley & Kivowitz 2001; Burchell 2011). Due to the increasing complexity and turbulence in the business environment, organizations must continuously make changes in their ways of working, structure and strategy in order to stay competitive in the dynamic market. Change has become an integral part of everyday life and the ability to adapt to it is one of the critical success factors for survival (Salminen 2000, p. 7). While these changes may present new opportunities, the very nature of change itself poses threats to the organization's existence and success. To cope with this paradox, organizations have adopted different techniques and models to manage change to their advantage.

Already 20 years ago, John Kotter's (1996) research revealed that no more than 30% of business change efforts succeed. Since Kotter's famous book, *Leading Change*, was published in 1996, the amount of research in the field of business change management (BCM) has increased rapidly. Kotter is one of the most famous academics in the field of change management, yet not the first. BCM has been a recognized discipline for over half a century, during which a growing body of research and heavy investments have generated new theories and frameworks for organizations to utilize (Burnes 1996, p. 11; Bamford & Forrester 2003, p. 546).

Despite the huge investments in process renewal, tools and training, McKinsey (2010) and The Standish Group (2013) among others, have reported that even today, only about a third of business change efforts are successful. This low success rate can in some cases be linked to poor management practices in general. However, considering that the academic literature is currently offering a wide range of confusing and complicated theories on change management, this poor success rate may also indicate a lack of a systematic and valid framework on how to manage change (By 2005, p. 370).

Change is often managed with the help of widely-spread models, practices or known frameworks, e.g. ITIL¹. According to The Project Management Institute (2014),

¹ Information Technology Infrastructure Library (ITIL) is the most widely adopted approach for IT Service Management. It focuses on aligning IT services with business needs. See: <http://www.itil-officialsite.com/>

organizations, which are effective in managing change are four times more likely to use some sort of change management practices. Paradoxically, they also found that frequent use of change management practices has declined over the last years from 71% in 2011 to 65% in 2014. (PMI's pulse of the profession 2014, p. 12.)

Change management methods cannot be applied in a template fashion, in exactly the same way in every environment (Newton 2007, p. 10). The BCM strategy and model need to take into account the unique context of the company and the change itself (Pettigrew et al. 2001, p. 698). Context variables, e.g. type of the change, size of the organization, culture, practices and strategy, need to be considered when making decisions about how to execute business change management (Hughes 2007, p. 42). Each organization is unique and has its own history, its own culture and its own way of functioning. Understanding the context, the relationships within the organization and the changing environment, greatly help the organization in choosing the right approach to managing change.

IT projects are nowadays the most typical change projects organizations face, as IT is involved everywhere in an organization processes, structure and strategy (Markus 2004, p. 5). Therefore, many of the changes organizations encounter happen through IT change projects. When introducing change, the problem in a majority of cases is not the technical aspects, but the human elements, such as cognitive and behavioral issues. Organizations need to acknowledge the softer side, the human elements, as part of the change process (Oakland & Tanner 2007, p. 573). Successful change requires that the human side; e.g. culture, values, people and behaviors; is taken into account to achieve the desired results.

Taking a purely technical approach to change tends to lead to the false assumption that an organization will naturally absorb all changes (Gill 2003, p. 309). It could be provocatively said that there are no purely technical IT projects, or as Paton & McCalman put it: "all change in organizations is about people" (2000, p. 150). If a project is seen as a purely technical IT project, the needs of the business teams are easily neglected and getting support from them will likely be much more difficult.

1.1. Target organization and research objective

The target organization in this thesis is a well-established European telecommunications, ICT and online service provider, originally founded over a century ago. The name of the company and specific details are not disclosed due to confidentiality. The study is initiated and funded by the internal IT department of the company, but the findings will be used more widely in the whole organization.

The IT and the telecommunication industries are well known for their rapidly changing environment, driven by legislation, technology and external customer needs. These

industries are also known for their project-based method of driving and implementing changes. For this reason, it is understandable that a well working business change management model is of great value in order to stay competitive in the dynamic market.

The company counts two employees and one external consultant working full-time with BCM. They are a valuable resource to the organization and constantly occupied with ongoing large strategic IT projects. As a consequence, they do not have the time to analyze and develop the BCM methods. Therefore, instead of developing the BCM model internally, the IT department initiated this study in the form of a master thesis. In addition, a fresh perspective from an external person was welcomed by the organization.

The target organization has already developed several BCM tools, which they have been using during the past 5 years. The tools are not very well known among the employees, and are mainly used by the three change managers of the company. In addition, some of the tools are seen as ambiguous and too difficult to use. These tools have been brought to the organization by an employee, who does not deal with change management anymore. Thus, they have not been updated to match the current needs of the organization.

This thesis is part of a bigger initiative to increase awareness about BCM and to make it a recognized practice in project management (PM). The target organization started this initiative already in 2009 when the first tools were introduced. The milestones of the BCM initiative are presented in Figure 1.1. However, until this day BCM has been one of the focus areas only in large strategic projects. This thesis is a step towards a more widespread use of the BCM practices and tools in the company, as the management has recognized that they should be used in smaller projects as well.

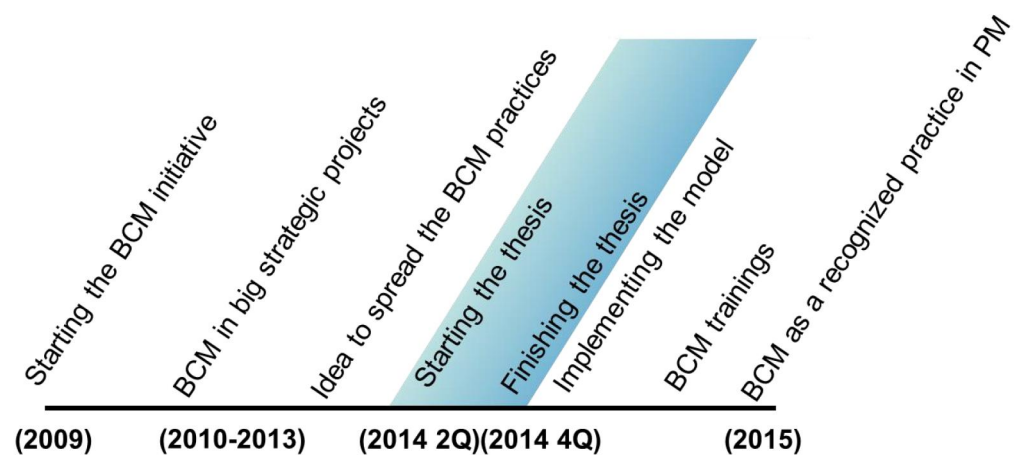


Figure 1.1. BCM initiatives in the target organization

During the past years, the company has created general conditions for successful change management. They have for example established a flatter structure with more empowered teams and employees, who are encouraged to be innovative, autonomous and entrepreneurial. The company has also introduced flexible learning programs to enhance

employees' competencies in successfully adapting to changes. On top of that, they promote the coaching leadership style among managers and supervisors.

After the thesis is finished and the BCM model is developed, the three change managers in the company will implement the model. They will use internal communication channels to increase awareness and interest in BCM. They will also train project managers and project team members on using the model and its tools in their own projects. These trainings will be held extensively in the end of 2014 and later in regular intervals.

1.1.1. Research objective

This study concentrates on the process and implementation of change, not on the content of change. In this thesis, various business change management models are presented, and change as a phenomena as well as IT project management are studied from various perspectives to create a business change management model that is suitable for the target organization and its IT project management methods.

The target organization has realized that in order to make their existing BCM tools more used, they need to be updated and put into a process. A BCM model in an easily understandable process-form is preferable to a list of activities and step to follow, because managers might lose the perspective of change as a process if it is merely a series of steps and tasks. In that case, the knowledge of how individuals respond to change might get lost. (Turner et al. 2009, p. 28.) Therefore, as a result of this thesis, the company should have an easily understandable BCM model with updated and concrete tools to utilize in their IT projects.

The main research question is normally constructed in a general form, which shapes the big picture, and the answers to the sub-questions allow answering the main research question (Hirsjärvi et al. 1997, p. 124). The goal of this research is formed into a main research question as follows:

What kind of a business change management model suits the target organization's IT project management methods and project culture?

The supporting sub-questions are:

- *What previously developed BCM models exist?*
- *What are the needs of the project managers regarding the BCM model being developed?*
- *How to integrate the BCM model to the project management methods and practices?*

The first sub-question is answered by performing a literature review and by exploring the relevant topics on BCM. The other two sub-questions are answered mainly by utilizing the chosen empirical research methods described later. The main research objective is achieved by combining findings from the theoretical and the empirical parts of the study.

A business change management model is rooted in solid research and theory. It is a simplified representation of the general steps in initiating and carrying out a change process and activities (Rothwell et al. 2009, p. 43). In this study it is assumed that models can be used to guide change implementation. Therefore, the concrete contribution of this thesis will be put into a form of a BCM model including the developed BCM tools.

The aim is not to develop a general model that would suit each and every project or business transformation in the organization, but to establish a model with suitable tools that provides support to the managers of IT related projects in particular. In other words, the model needs to be general enough to be applicable in all the IT projects which require change in users' behavior, yet specific enough to provide concrete and usable tools for the project managers of these projects.

1.1.2. Scope and limitations

Research on change management is scattered very broadly as it has a multidisciplinary nature. Business change management is closely connected to psychology, social sciences and organizational management sciences. This thesis is focused on change management in the business context, and in the organizational or group level. Although the individual level of coping with personal changes has to be taken into account while managing change in the whole organization, it will not be the focus of this study.

This thesis focuses on BCM from the human perspective, excluding technical change management. Although technical change management and the ITIL framework have an essential role in the target organization's change management process, ITIL practices will not be further discussed in this thesis. As the link between ITIL and the developed BCM model is so weak, it is not seen relevant to discuss here. Therefore, as important as it is to understand ITIL, technical change management is out of the scope of this study.

The theoretical scope of this study is illustrated in Figure 1.2. This thesis will focus on BCM inside the project management discipline, more specifically within the internal IT project management sector. Over the years, social scientists have studied change from the human perspective, whereas process and other engineers have studied change from the technical, process or control perspective. Management literature has made efforts to combine these viewpoints, yet there is still very little research on BCM in the IT project management context (Salminen 2000, p. 80).

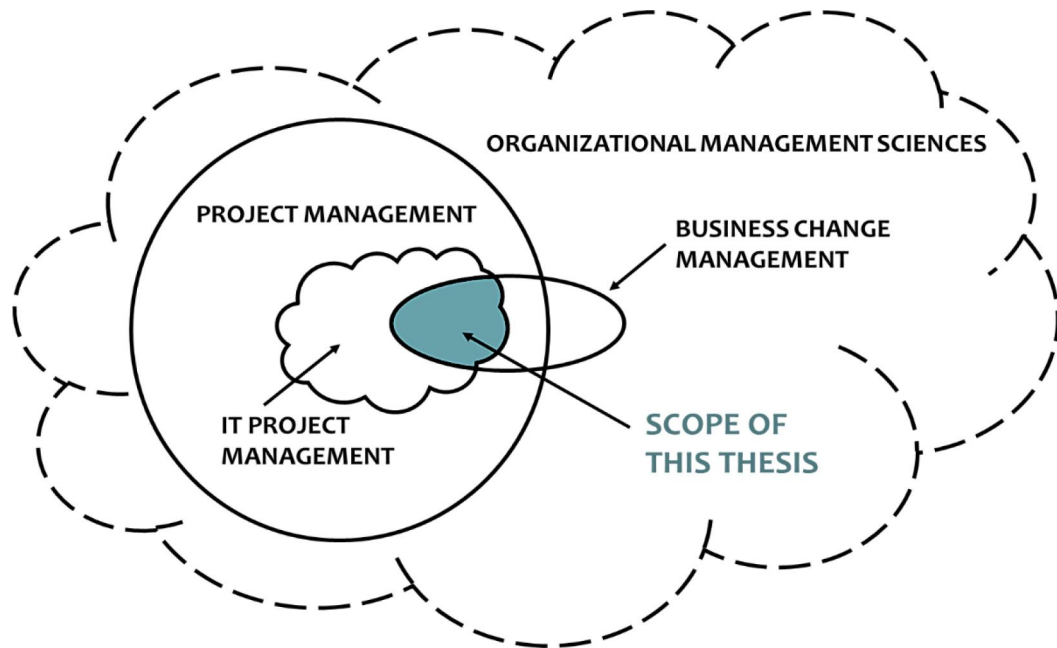


Figure 1.2. Scope of this thesis

The work in this thesis has to follow the limitations given by the target organization. It was said in the starting phase of the thesis that the company's old templates serve the needs of projects rather well when used correctly, but none of them are useful individually. Therefore, the following aspects should be kept in mind.

Firstly, the templates should be integrated and made into a consistent and easy to follow process. The new model has to be integrated into the project management methods of the company and uploaded to the internal SharePoint² site, which sets certain restrictions regarding the format of the model and its tools. Secondly, the attention is more specifically on BCM for internal IT project purposes. Internal change projects differ from external projects as the members of the organization are both the suppliers and the customers of the project, which can lead to competition for resources and difficulties in determining project success or customer satisfaction (Salminen 2000, pp. 86-87). For legislative reasons, the work in this thesis also excludes large-scale organizational transformations or development projects, which involve restructuring. Thus, major organizational change initiatives that involve laying off employees, e.g. mergers, streamlining and restructuring are not discussed in this thesis. Finally, the requirements for the developed model are viewed from the perspective of the BCM model's ultimate users, the IT project managers. The needs of the project managers form the basis of this research, and the model is developed with the purpose of satisfying those needs.

² Microsoft SharePoint is a web application framework and platform that integrates intranet, content management and document management, but recent versions have broader capabilities.

This thesis describes the development of the BCM model's phases, activities and tools, which will afterwards be adopted in the organization. Nevertheless, no real implementation or adaptation will be described here due to the timeframe and scope of the study. The main phases of the developed BCM model will be presented and justified by theory and empirical findings. However, the model's specific activities, including the organization specific tools, will not be discussed in full detail due to confidentiality.

1.2. Methodology

A research project is frequently initiated when solving the problem needs more knowledge and resources than what an organization can grasp from its day-to-day operations. New information is required for understanding the complex problem better and for finding solutions to it. (Hirsjärvi et al. 1997, p. 19.) Before conducting the study, the researcher has to analyze the research problem and based on the analysis choose which methodological choices to apply. This section will introduce and justify these methodological choices. The research philosophy, nature of the research, approach and strategy used in this thesis are presented in Figure 1.3 and they will be described in more detail later in this chapter.

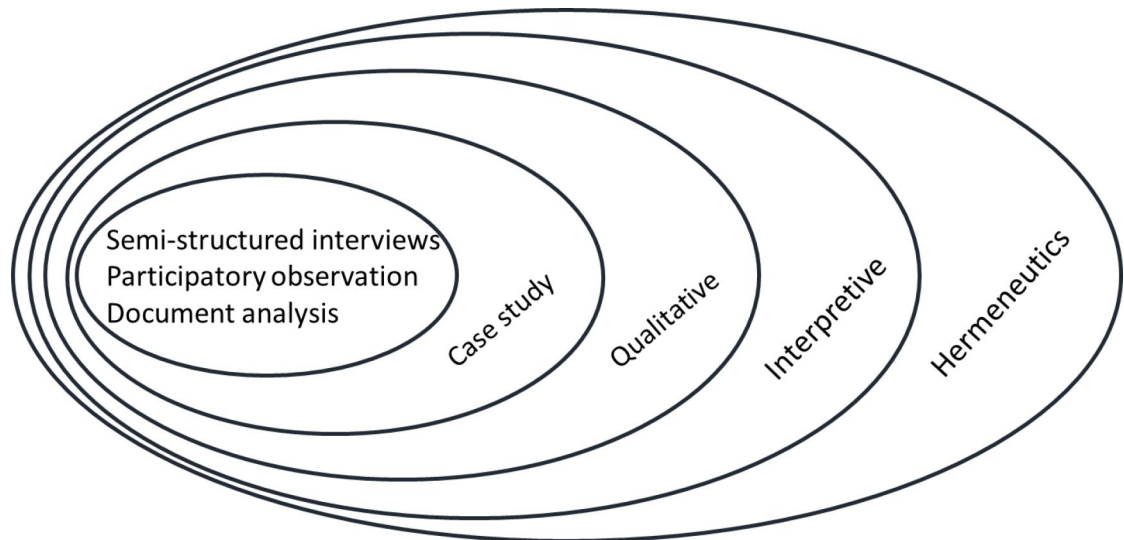


Figure 1.3. Research philosophy, nature, approach, strategy and data collection methods used in this thesis.

Figure 1.3 illustrates that this thesis follows the hermeneutic research philosophy and has an interpretive nature. It follows the qualitative research approach and uses a small sample size. The thesis focuses on a unique case organization, and the aim is to develop understanding based on the existing knowledge and empirical data gathered in the interviews, document analysis as well as observations during the research. The data collection methods and their application will be described in chapter 4.

1.2.1. Research philosophy and nature

Research philosophy is used as an umbrella term to describe the creation of knowledge and the nature of that knowledge. Research, including applied and very practical research, is always based on certain hidden assumptions about the way the world works. When these hidden assumptions are understood, different methodological choices can more easily be made and justified. (Hirsjärvi et al. 1997, p. 125.) Next, two of the most widely-spread and known research philosophies, positivism and hermeneutics, are introduced.

Positivism is directly associated with the idea of objectivism and it is sometimes also referred to as the philosophy of the natural sciences. It is an objective research philosophy that is based solely on proven facts and its focus is on explaining phenomena. (Olkkonen 1994, pp. 26-27.) The positivism philosophy creates cause-and-effect models, has a critical and objective nature, relies on deduction and pursues generalizations. According to the positivism paradigm, knowledge is accurate and certain, it can be described in a systematic way and it holds true for large groups of people or occurs in many situations. (Oyegoke 2011, p. 574). Positivism is mainly focused on collecting numerical data, testing theories in a controlled setting and empirically supporting or falsifying hypotheses through experimentation. An important issue is repeatability, which states that different researchers will obtain similar results when using the same data and the same research methods. (Olkkonen 1994, p. 35.) Quantitative methods are favored in positivism, since they ensure that there is a distance between the subjective biases of the researcher and the objective reality of the studied phenomenon (Oyegoke 2011, p. 574). In other words, in positivism the researcher is independent and neither affects nor is affected by the subject of the research.

Hermeneutics on the other hand, is an idealistic philosophy that focuses on interpretations, meanings and understandings, as opposed to describing cause and effect (Butler 1998, p. 286). In hermeneutics reality is subjective, the world is complex and constructed, interpreted and experienced by people in their interactions with each other and with a wider social system. Subjective reality is important and the philosophy realizes that the researcher is part of the research process, and that the collection and analysis of data involves the researcher's own subjectivity (Butler 1998, p. 293). The hermeneutic philosophy forms an opposite to those philosophies that stress objectivity and independence from interpretations. Hermeneutics is therefore often referred to as the philosophy of the humanities. In hermeneutics the emphasis is on understanding the phenomenon, the data used is usually qualitative and it cannot be verified that different researchers would understand the data and the phenomenon in exactly the same way. (Olkkonen 1994, p. 35.) In the hermeneutic philosophy, knowledge is constructed based not only on observable phenomena, but also on subjective values, beliefs and understandings. The aim is to make sense of the whole; the relationships between people, the organization and information technology (Myers 2008). In hermeneutics, the

researcher often tries to capture insider knowledge using iterative and inductive reasoning. This philosophical approach is rather well suited to specific business situations.

This thesis is conducted in a business context. As the aim of this study is to solve a practical problem for a particular organization, repeatability of the study is not considered very high. Furthermore, the aim is to gain understanding and not to explain any general phenomena. Although this thesis has some positivistic features, due to the highly interpretative nature of the research problem, this thesis will mostly utilize the hermeneutic research philosophy.

This thesis has an interpretive nature, which has gained popularity in the IT field in the turn of the millennium (Walsham 2006, pp. 320-321). Interpretive research is hermeneutic in character (Myers 2008), and therefore it goes hand in hand with the research methodology of this thesis. Interpreting is not an easy task, and for more accurate and valid results, Walsham (2006, p. 323) suggests using multiple data collection methods. In this thesis, interviews are the main data collection method, and they are complemented by document analysis and participant observations. Despite using multiple sources of data, interpreting is never a straightforward activity, as it is very subjective and characterized by ambiguity and conflict (Butler 1998, pp. 289-290). The quality of data in a qualitative study depends to a great extent on the methodological skill, sensitivity, and integrity of the researcher (Patton 2005, 1364).

1.2.2. Research approach and strategy

There are said to be two main research approaches, qualitative and quantitative. Quantitative research is often associated with the positivism research philosophy, and it generally involves collecting and converting data into numerical form. This data is usually collected in various means and prepared for statistical analysis from where conclusions are drawn. The emphasis of quantitative research approach is on deductive reasoning, which tends to move from the general to the specific. (Hirsjärvi et al. 1997, pp. 131-132.) In other words, the quantitative approach aims to generalize the obtained results to a larger theory.

The qualitative research approach on the other hand, aims at forming a deep understanding about the unique subject of the study. It is widely used and recognized in management studies, which often rely on case studies of companies (Patton 2005, p. 1364). Qualitative research methods are aimed at helping researchers understand people, organizations and the social and cultural contexts within which they reside (Myers 2008). Deep understanding is one of the prerequisites for success in this thesis, which indicates that the qualitative research approach is a suitable approach to follow in this thesis. Because of because of the hermeneutic research philosophy, interpretative nature of the

research question and qualitative data collection methods used in this study, it is clear that the qualitative research approach is well suited for this thesis.

A research strategy refers to the way in which the research question is answered. It is a strategy of inquiry, which covers the underlying philosophical assumptions, research design and the collection of data (Myers 2008). In other words, the choice of research strategy influences the way in which data is collected and interpreted. Specific research strategies also imply different skills, assumptions and research practices (Myers 2008). This thesis follows the principles of a qualitative case study, which allows the understanding of a complex social phenomenon and processes (Gorman & Clayton 1997, p. 50).

A qualitative case study generally includes examining a discrete entity comprehensively, conducting a complex literature review to the source material, using qualitative data collection methods and preferring humans as the instruments to collect information (Gorman & Clayton 1997, pp. 50-51). Since a case study is based on empirical real-life observations, it is wise to use multiple and complementary data collection methods to minimize the bias between the researcher and the subject of the study (Hirsjärvi et al. 1997, p. 131). In case study research, the target group selection is usually conducted purposefully, rather than using a random selection (Hirsjärvi et al. 1997, p. 160). The power of purposeful sampling lies in selecting information-rich cases, from which one can gain insights and in-depth understanding (Patton 2005, p. 1365).

Case study is selected as the research strategy, since the research question in this thesis is focused on one unique and specific case inside the target organization. The complementary data collection methods used here are interviews, participant observation and document analysis. The thesis requires forming a deep understanding about the BCM practices, the culture and the IT project management methods of the target organization. Consequently the results and conclusions are applicable solely to that company and cannot be generalized to form a larger theory.

1.3. Structure of the thesis

This first chapter introduced the reader to the topic by describing the motivation, the background, the research problem, the scope of the study and the methodology. The theory part of this thesis consists of chapters 2 and 3, where the relevant theories on IT project management and business change management are reviewed and integrated.

Chapter 2 begins with the definition of business change management, after which different dimensions of change are presented to form a deeper understanding about the topic. The chapter continues by describing the need for BCM and the ways to manage change. Success factors and key activities for managing change, as well as managing the

resistance to change are introduced. Finally, the most widely spread previously developed BCM models, their similarities and main differences are discussed.

Chapter 3 starts with introducing IT change projects and exploring the connection between the practices of business change management and IT project management, as well as describing ways to successfully drive changes in project form. The chapter continues by describing different project management methods used in the target organization to better understand the project management reality. The chapter finishes by presenting reasons for failure in IT project management and introducing ways to prevent them with business change management activities.

Chapter 4 will justify and elaborate on the empirical data collection methods used in this thesis. The fourth chapter will also explain in more detail how the study was executed and the data collected and analyzed.

Chapter 5 will summarize some of the key findings from the interviews, participant observation and document analysis conducted during this study. The findings are categorized into themes, and each theme is presented in its own subchapter.

In chapter 6 these empirical findings are merged with the theoretical findings in describing the development of the organization specific BCM model. The main phases of the model and their content are described.

Chapter 7 will discuss the developed BCM model and give some recommendations to the target organization based on observations made during the data collection. Practical contributions of the study are discussed and answering the research question is evaluated.

In chapter 8 the study is summarized, conclusions are drawn and contributions of the thesis are evaluated.

2. BUSINESS CHANGE MANAGEMENT

Never before has there been a time when change management has had such an essential role in an organization's adaptation and survival (Beer & Nohria 2000; Oakland & Tanner 2007). In today's highly competitive and vastly changing environment, speed and flexibility are essential. The most successful organizations in the long run are those who continuously adapt to changes in their environment (Sauser & Sauser 2002, p. 34). The rate at which individuals and organizations adapt and learn may become the only sustainable competitive advantage, especially in knowledge-intensive industries (Stata 1989, p. 64; Rothwell et al. 2000, 54; Dale et al. 2013, p. 202). Thus, organizations cannot ignore that a great deal about adding value comes from ensuring an effective and sustainable management of change (Paton & McCalman 2000, p. 38).

Business change management is a complex entity that draws on a number of interwoven disciplines and traditions of psychology and social sciences (Burnes 2004b, p. 261). Consequently, several different ways to define change management can be found in the academic literature. BCM can be defined among others as the task of managing change, as an area of professional practice, as a body of knowledge or as a control mechanism (Nickols 2010 p. 2). People with different backgrounds also understand change management very differently (Newton 2007, p. 9). For example, engineers tend to see change management as a process of managing technical modifications or specifications of a machine or process, whereas business people generally understand change management more from the control perspective of managing deliverables and the scope of a project.

In this thesis, business change management refers to the act of making changes in a planned and systematic fashion to achieve a desired impact in the organization. A more precise definition is adopted from Prosci, who defines change management as: "the application of a structured process and set of tools for leading the people side of change to achieve a desired outcome" (Prosci 2014). Business change management does not focus on the content of change, but on the process of how the change is implemented (Harrington et al. 2000, p. 3). The focus is on the process of managing the human infrastructure that surrounds projects so that employees are better prepared to absorb the changes affecting them.

In the literature BCM is often referred to as just change management. In this thesis the business word is used to emphasize the business context and the human side of change management. The business context refers to strategy, structure, culture, technology, systems, and processes within which employees function.

The field of business change management seems to be tangled with many research disciplines and without clear boundaries. BCM is closely connected to the terms organizational development, business process reengineering and systems thinking. They all originate from a similar school of thought of organizational performance management, yet they have slightly different approaches to it. According to Harris (2006, p. 39), organizational development attempts to understand an organization's dysfunctional dynamics and to develop strategies and methods to improve the dynamics. The goal of business process reengineering is to understand the factors contributing to inefficient business processes and to reengineer the process by changing and improving those factors. Systems thinking views structures, processes, relationships and outcomes with respect to a holistic process approach to reality. Misunderstanding the connection of these terms to BCM has resulted in the lack of appreciation for business change management (Harris 2006, p. 39).

2.1. Dimensions of change

There are various ways in which change can be classified. Authors differentiate between planned and emergent change, remedial and developmental change, anticipatory and reactive change, top down and bottom up change, radical and incremental change, and organization-wide and subsystem change. These are just some classifications found in the academic literature. It is good to know the different classifications, but change in reality is usually a combination of two or more of the recognized types of change (Paton & McCalman 2000, p. 23). Mostly the differences between various categorizations lie in the nature (incremental or radical), scope (large or small impact area) and intensity (sudden or slow) of the change. These three main dimensions are presented in Figure 2.1.

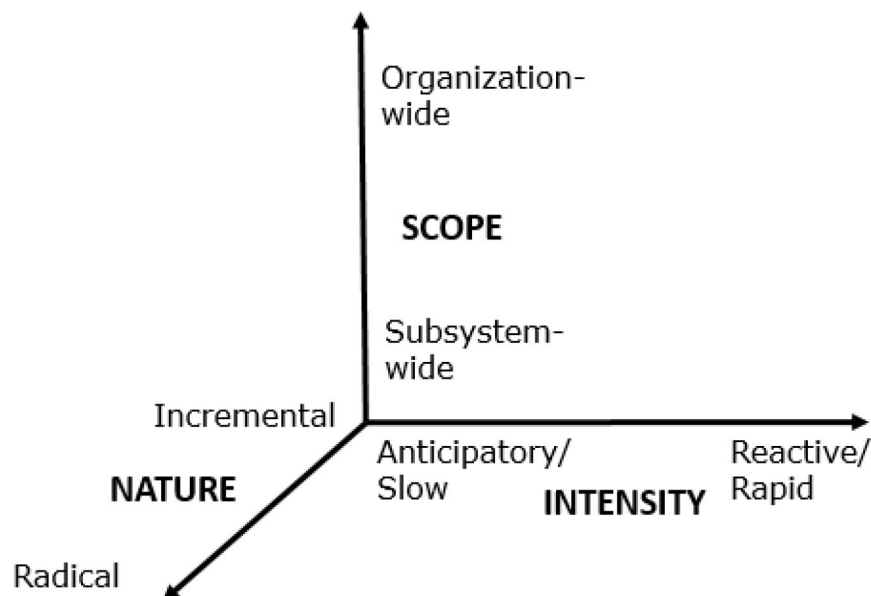


Figure 2.1. Dimensions of change. (Adapted from Salminen 2000, p. 17)

Changes deployed with IT projects are generally intended to be incremental, anticipatory, subsystem changes. Therefore, the BCM model developed in this thesis will put greater emphasis on managing change that has these dimensions. The scope, the nature and the intensity of change are factors that need to be understood, although they are largely outside the influence of the project manager managing the change. The main dimensions of change are described in more detail in the next sections.

2.1.1. The scope of change

A subsystem change is rather predictable and controllable in nature, whereas organization-wide change is not fixed or linear in nature, but contains an important emergent element (Iles & Sutherland 2001, p. 14). A subsystem change can be easily deployed in project form, as it requires a simple, systematic method, while an organization-wide change needs a more complex roadmap in order to be successful (Lehmann 2010, p. 334).

Whether the change being managed is an organization-wide change or a subsystem change, the underlying principles and elements of BCM do not differ significantly. However, in an organization-wide change, the social and cultural issues, such as behavior, values and attitudes towards change, have to be taken into account with a more serious consideration, as the change has a more widespread impact in the organization. This results in a much more complex change management process for organization-wide changes.

2.1.2. The nature of change

Radical changes, sometimes called ‘episodic’, ‘second order’, ‘discontinuous’ or ‘transformational’ changes, occur as a response to the external environment and often involve replacing one strategy or mission with another (Burke & Litwin 1992, p. 523). These changes are single abruptions in the way organizations work, and are usually followed by a long static period (Luecke 2003, p. 102). Radical changes address the whole organization and frequently involve breaking out of a current pattern of congruence and helping an organization to develop a completely new configuration (Nadler & Tushman 1989, p. 196). Technological discontinuities and innovations are good examples of external events, which can radically transform an organization.

In contrast, incremental changes, also referred to as ‘first order’ or ‘continuous’ changes, are ongoing, evolving and cumulative step-by-step actions towards the organization’s ideal (Iles & Sutherland 2001, p. 14). Incremental changes focus on individual components of the organization and are made within the context of the current set of organizational strategies and components (Nadler & Tushman 1989, p. 196).

Until the late 1970s, the incremental view of change dominated, which sees change as a process where parts of an organization deal incrementally with one problem and one goal at a time, and over time the organization becomes transformed (Burnes 2004a, p. 990). During the last decades, changes have happened more often and their nature has radicalized. Consequently, a more chaotic view of change has become prevalent.

2.1.3. The intensity of change

The last dimension of change concerns the positioning of the change in relation to external events. Anticipatory changes are initiated in anticipation of external events that may occur and not in response to events that happened (Nadler & Tushman 1989, p. 196). Anticipatory change is slower and easier to manage, as it is usually constructed in a strict organizational change or transformation agenda. Many of the models and approaches to organizational change found in the academic literature support this anticipatory, controlled and orderly view of change.

Other types of changes, in contrast, are made clearly in response to a series of external events. These are called reactive changes, and they are usually made in a rush and managed in an ad hoc manner (Burke & Litwin 1993, p. 523). Reactive changes are more intense than anticipatory changes, because they require substantial activity in a short period of time without the opportunity to prepare people for the change (Nadler & Tushman 1989, p. 196). Therefore, when making and managing reactive changes, there is also less room for error and corrective actions.

In practice, change is always more or less chaotic, often involving shifting goals and objectives, unexpected events and surprising end results. This does not mean, however, that it cannot be managed well.

2.2. Managing change

As organizations must all deal with change in their everyday lives, they must learn to manage it efficiently. Change management is critical to the success in any business transformation, regardless of its size, and especially in IT projects. Therefore, change must be carefully planned to achieve the desired results. Yet, a majority of organizations have problems with the way they approach and implement changes. Even fairly small, simple and straightforward IT projects seem to struggle with BCM. A possible explanation is that in the BCM literature there is a considerable disagreement regarding the most appropriate approach for managing change (Bamford & Forrester 2003, p. 547; Rothwell et al. 2009, p. 68).

Whether the effects of change are positive or negative will depend to a great extent on how the change is managed. If managed properly, change can result in realizing planned business benefits (e.g. higher productivity, cutting costs or better customer satisfaction),

or may even open doors for new types of business opportunities for the company. If managed poorly, the effects of change can cause major unwanted disruptions in the organization.

Generally, immediately after a change is introduced, the performance level of the organization impacted by the change drops significantly. The major cause of this decrease in performance is that employees are unable to function at the same level of performance, as they need time to learn the new processes and ways of working. After the change is implemented, the performance level should rise higher than it was before the change, but the time it takes to reach the higher level is dependent on the scope and magnitude of the change, as well as how it is managed.

Managing change successfully minimizes the negative effect on performance by minimizing the impact of change on employee productivity, avoiding unnecessary turnover, minimizing the impact on employee motivation, eliminating adverse impact on customers and producing the desired results faster (Payne 2005, p. 5). Therefore, when change is managed properly, the performance level of the organization stays at a more stable level throughout the change implementation, the improved level of performance is achieved faster and it rises higher (Newton 2007, p. 8). This can be considered as the goal of successful business change management, and it is illustrated in Figure 2.2.

Figure 2.2 depicts how the performance of an organization varies over time, when BCM is not practiced well or at all (a), and when BCM is practiced (b).

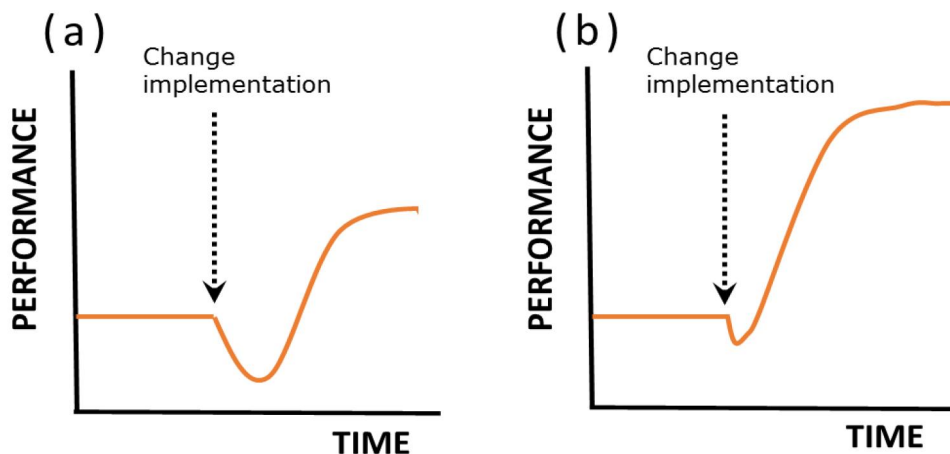


Figure 2.2. Goals of business change management (adapted from Newton 2007, p. 8)

Management often sees BCM solely as an expense without any tangible returns. IT projects are not seen as investments, but as pure costs that must be controlled (Charette 2005, p. 46). This way of thinking can be very harmful to the organization. Salminen (2000, p. 15) argues that every change effort should be regarded as an investment, as the results gained should always exceed the resources, e.g. time and money, put into making the change happen. Furthermore, often it is wrongly assumed that change is solely aimed

at improving financial results and it is forgotten that successful change implementation also generates soft benefits, e.g. trust, organizational capabilities and better communication and commitment among employees.

Business change management is largely about people management, and people have an essential role in its success. Therefore, the problems of managing an IT project are often linked to the “people” corner of Leavitt’s (Leavitt 1965) well-known diamond model presented in Figure 2.3. It is often far more difficult to change employees’ mindsets and behavior, than it is to alter technology and structures. Consequently, people tend to be the most neglected, yet most crucial component in successful change implementation (Martin & Cheung 2002, p. 460; Oakland & Tanner 2007, p. 573).

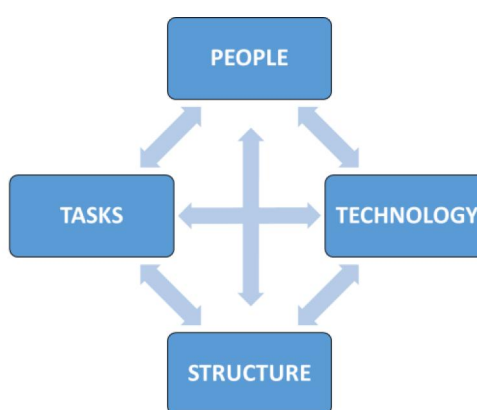


Figure 2.3. Leavitt’s diamond model (Adapted from Leavitt 1965)

Many organizations have introduced more empowering structures, cultures and ways of working to better cope with changes. In other words, employees are encouraged to make a difference in their organization. As a consequence, change management is discreetly incorporated into the existing roles and responsibilities of employees. (Doyle 2002, p. 465.) Project managers in particular may discover that their existing personal capacities and skills (influencing skills, intrapersonal skills and interpersonal skills) are no longer sufficient when they find themselves involved in managing change. Therefore, basic change management skills should be part of every project manager’s set of skills (Sims 2002, p. 161). However, organizations often fail to provide the needed support and training for these novice change managers (Doyle 2002, p. 466).

The execution of a change can go only as fast as the ability of employees to absorb and make sense of the changes (Galoppin & Gaems, 2007, p. 30). Therefore, BCM is greatly focused on achieving the goals of the change by managing people through their own transitions (Hiatt & Creasey 2003, p. 8). Failing to lead the people side of change can result in lower proficiency, slower adaptation and lower utilization of the outcomes of the project (Hiatt & Creasey 2003, p. 7). Ultimately, business change is an alteration in the working behavior of people (Oakland & Tanner 2007, p. 583). Consequently, employees

need to adapt their skills, capabilities and attitudes in order for the change to be successful and for the outcome to stick in the organization.

To conclude, business change management is strongly linked to people management, and should be considered as a valuable investment with genuine returns. Business change management is not about adopting the best practices laid down by consultants or the latest experts, it is about choosing what to change, choosing the circumstances under which the change takes place and adopting a suitable approach (Burnes 1996, p. 17). BCM practices are an essential part of organizations' renewal, growth and adaptation. According to Doyle (2002, p. 465) change management has shifted from solely being the responsibility of a dedicated change manager to increasingly being identified as a core competency for most organizational leaders. In other words, the skills required to manage and implement changes are being incorporated into the existing roles and responsibilities of many managers and other employees. Some would even argue that the primary task for management nowadays is the management of organizational change (By 2005, p. 370).

2.2.1. Success factors of business change management

Many critical success factors of change projects are not one-time actions, but rather underlying conditions, ways of working, or processes that last through the change project (Salminen 2000, p. 67). As there is a lack of consensus on the best model or process for managing change, similarly there seems to be some disagreement about the success factors of business change management. Nevertheless, there are several success factors that appear in the literature more often than others. These success factors are communication, leadership, stakeholder management and project management, and they will be presented next.

Communication

Some experts suggest communication is 80–90% of a project manager's job (Baca 2005, p. 135). Communication is attached to the BCM process extremely tightly (Lehmann 2010, p. 330), and researchers who study organizational change all seem to agree that communication is a key factor for success. It seems to be impossible to overemphasize the importance of frequent, consistent and open communication.

Companies often underestimate the role that managers and employees play in the success of change projects by communicating with them too late or inconsistently (Sirkin et al. 2005, p. 112). Consistency is essential when an organization is going through a change. All used media should carry the same message and focus on reinforcing the change (Klein 1996, p. 38). Lack of communication or inconsistent messages result in misunderstanding the goals and process of the change project. This in turn leads to rumors that demoralize

people and destroy any commitment towards the change initiative (Kanter et al. 1992; Gill 2003, p 308).

Through communication, expectations about the change can be managed. Communication can be also used to create urgency in the organization and initiate changes, i.e., challenge the status quo. It is of great help in unfreezing people and organizations, and it helps to prepare them to feel lost before recovering and regaining productivity. (Klein 1996, p. 37; Lehmann 2010, pp. 328-330.) However, communication is not only important in the initiation phase, it should be practiced during the whole change project to help employees go through the whole transition period. In other words, communication should happen in a frequent, constant and open flow (Sims 2002, p. 72). Rather continuously giving out small pieces of information, than waiting to have the whole story with accurate details published at once.

Lack of communication severely hinders the implementation of change, and can easily bring about change resistance (Oakland & Tanner 2007, p. 580). It is hard to find support for a project, which has very little information available on it. Generally, when employees receive poor communication, it causes them to withdraw support from the change without even realizing themselves (O'Connor 1993, p. 30). Employees who withdraw their support as a consequence of poor communication, are generally not against the change. Yet, withdrawing support can be considered as a passive form of change resistance.

Ineffective sponsorship and resistance to change are identified as major obstacles to change by Hiatt & Creasey (2003, p. 127). Both of these obstacles could be mitigated through a better planning and better management of the communication in the change project. Therefore, establishing good communication channels and practices is a crucial point in managing a change project, and should dramatically reduce the probability of failure.

Leadership

Leadership is about showing the way, inspiring others, creating and communicating the vision and direction, i.e. using personal power to win the hearts and minds of employees to work together towards a common goal (Gill 2003, pp. 309-310). Management on the other hand refers to processes, such as planning, controlling and organizing. While change must be well managed, it also requires leadership to be successfully initiated and sustained. Leadership has a key role in setting direction, inspiring change throughout the organization and ensuring that change is implemented (Burke & Litwin 1992; Beer & Nohria 2000; Oakland & Tanner 2007).

According to Gill (2003, pp. 307-308), leadership that facilitates successful change requires the development of a culture of supporting the vision and strategy, as well as

empowering and motivating employees who are affected by the change. Empowering employees helps maximizing their involvement in every step of the change implementation. Charismatic leadership is crucial in engaging and empowering employees, facilitating the process and building change capability. The larger and more radical the change, the more important strong leadership is for succeeding. (Burke & Litwin 1992, p. 530.)

Leadership also plays a role in controlling the dynamics of organizational power politics. Change disturbs the political balance within an organization and leads to increased political activity (Nadler 1982, p. 42). Hence, the element of power politics is tightly intertwined with planning and implementing change (Nadler & Tushman 1989, p. 202; Paton & McCalman 2000, pp. 259-266). Active local leadership shapes the political dynamics of change (Salminen 2000, p. 159), which can accelerate the driving forces of change and help to break down change resistance. Clear and consistent leadership can turn the need to change into expectations, values, aims, measured objectives and targets (Oakland & Tanner 2007, p. 584).

While strong leadership is highly important, it cannot, by itself, sustain and guarantee the success of a large-scale organizational change. Success depends on a broader base of support built with other individuals who in the beginning act as followers, then as helpers, and finally as co-owners of the change (Nadler & Tushman 1989, p. 200). Establishing this broad and strong base of support is called stakeholder management, and it will be described next.

Stakeholder management

Stakeholders include people at all levels of an organization and occasionally people outside an organization who are influenced by or can influence the success of the change project (Rothwell et al. 2009, p. 253). Stakeholders add pressure on the project and boost its risks level, as success is not purely a matter of cost, time and quality anymore, but a matter of stakeholder satisfaction as well (Lehmann 2010, p. 332).

As a consequence of flatter organizational structures and eroded status differences, employees are expecting to be more involved in decisions about organizational change. In other words, successful change is increasingly reliant on generating support and enthusiasm for proposed changes among stakeholders. (Piderit 2000, p. 783.) Poor stakeholder management has been identified as one of the main causes of project failure by several authors (see e.g. Benjamin & Levinson 1993; Harrington et al. 2000; Charette 2005; Kappelman et al. 2006). Hence, commitment from stakeholders, e.g. affected staff, key users, management and business owners, is a cornerstone in all change projects (Sirkin et al. 2005, p. 110).

Stakeholder management is recommended to start early in the project initiation. As stakeholders can have different expectations about the outcome of the project, they place conflicting requirements on the project team. (Harrington et al. 2000, p. 137.) Therefore, analyzing and communicating with the key stakeholders as early as possible is of high importance also in creating clarity about the aim of the project.

Key stakeholders, sometimes also referred to as sponsors, are individuals or groups with the power to determine whether the change will occur (Fossum 1989, p. 4). Support from these key stakeholders (generally middle and top management) is particularly important, because they have more influence in the organization, and can therefore help reaching an even bigger audience (Hiatt & Creasey 2003, pp. 125-126). On the other hand, it is difficult to reach managers and to get them committed to change, as they might not have direct interest, and as a consequence not enough resources and time for the project.

Clearly identifying key stakeholders and exploring ways to involve them in the planning and managing the change process is an essential step in building commitment (Rothwell et al. 2009, p. 257). Building commitment is a developmental process and it will not be achieved without a plan of action (Harrington et al. 2000, p. 65). Plans for building commitment should include all parts of the organization that will be affected by the change.

After launching the change project, constant support for the change should be established especially among the key stakeholders. Managers often make the mistake of thinking that it is enough that key stakeholders indicate support at the launch of the change (Klein 1996 p. 41). However, periodic supporting statements from key stakeholders, which highlight the progress and reinforce their support, serve the project much better.

Before attempting to make a change, the relationships among the project's key stakeholders and other employees affected by the change should be identified and examined (Harrington et al. 2000, p. 66). Every project can have a different set of stakeholders and very different ways of managing them. Nevertheless, analyzing and managing stakeholders is something that should happen in every change project despite its magnitude or scope (Martin & Cheung 2002, pp. 459-460).

Project management approach

Recently, incorporating BCM to project management has become a new challenge for organizations, as they want their changes to be more successful, and they see project management as a way of gaining performance (Lehmann 2010, p. 328). Many companies recognize project management as their core competence and seek to deliver benefits to the business through effective management of projects.

In enterprises and other organizations, projects are often the vehicles for managing and implementing organizational change. A project-based approach to managing change increases the chance of success (Martin & Cheung 2002; Oakland & Tanner 2007). The project-based approach is valuable especially in the planned change approach, where the need to identify changes and to set clear, measurable goals for achieving them is important. Research has indicated that this area of setting clear measurable objectives for the change and evaluating their achievement is an area with room for improvement in many organizations. (Oakland & Tanner 2007, p. 582.)

Apart from only being a method of changing organizational practices and structures, a project can also be perceived as a process of learning. However, nearly two-thirds of organizations report using an outsourced project manager. Furthermore, 26% of organizations are planning to increase the number of outsourced project managers in the near future. (PMI's pulse of the profession 2014, p. 10.) This indicates that surprisingly few organizations are focusing on knowledge transfer within and between project teams and units.

Oakland & Tanner (2007, p 580) have found that cross-functional teams with high performers are a significant contributor to successful change. However, even high performers will not remain high performers, unless they constantly share knowledge, learn and improve. Therefore, investing in the development of project managers and key resources in a change project can pay out very quickly, and result in an immediate performance leap (Martin & Cheung 2002, p. 461).

When delivering changes in project form, the need for the change project should always come from the organization's strategy, and the project should be based on a legitimate business case with a clear business owner (Kappelman et al. 2006, p. 34). This is especially true with IT change projects, because an IT project may have a widespread impact, but it may not generate major change to the business or organizational structure. This in turn may mean that the change fails to motivate the organization to adopt new processes and ways of working. Therefore, for an IT change to be successful, it is best to make it part of a bigger strategic incentive or a large business case.

2.2.2. Managing the resistance to change

Resistance is a way of saying 'no' to change. It can be direct opposition or withholding support for certain plans or projects. (O'Connor 1993, p. 30.) Resistance has also been defined as a restraining force moving in the direction of maintaining the status quo (see e.g. Lewin 1947; Piderit 2000).

Conner & Newman (1988, p. 62) argue that major organizational changes do not occur unless pain is experienced by the organization. Unfortunately people often perceive resistance as a negative phenomenon that should be avoided by all means. The belief that

resistance is a bad thing is caused by the fact that emotions about change are generally interpreted as negative and directed against the change. However, resistance is emotion and emotion contains energy needed to move the organization from the current state to a desired future state. (Galoppin & Gaems 2007, p. 62.) To succeed in that, the cost of maintaining the status quo must be greater than the cost of changing (Harrington et al. 2000, pp. 74).

Although all change projects are likely to encounter some form of resistance, people do not necessarily resist the change itself but they fear the instability and unknown it creates. The resistance can be caused for example by a lack of belief that there is a serious need for change, different descriptions of the need for change, no agreement about the goals of change, lack of belief that the goal is attainable, or no confidence in the manager of change (O'Connor 1993, p. 33). In fact, many barriers to successful implementation of organizational IT changes seem related to the absence of clarification of both the real needs and the problems to be solved by the change (Bartoli & Hermel 2004, p. 418).

The absence of reliable information further worsens the fear of the unknown as people will invent concerns and imagine the worst. Fear is an emotion, and emotions are infectious (Galoppin & Gaems 2007, p. 62). When an event causes fear in an individual, it is easily spread into the team, the department or the whole organization. Change cannot happen in an environment full of fear (Luecke 2003, p. 29). Employees have to feel free to challenge the status quo, identify problems and suggest solutions, even when they disagree with the views of the top and middle management.

People by default resist solutions imposed to them by individuals who lack intimate familiarity with their daily operations (Luecke 2003, p. 35). Their resistance is expressed through a lack of motivation and low commitment to change. People are much more likely to support what they have helped to create, than what is forced onto them (Gill 2003, p. 316). In addition, encouraging involvement can help to prevent the trap of the top-down approach: the problem being improperly defined, and the solution too narrowly drawn. Either of these can torpedo the change project. (Luecke 2003, p. 34.) While many change leaders recognize resistance when it occurs, many do not know how to anticipate or diagnose potential resistance prior to the start of a change project (Burchell 2011, p. 19).

According to Sheth (1981, p. 275), there are two fundamental sources of resistance to change, which are habit and perceived risk. The former is related to human cognition, which is attuned into preserving the habit as it strives for consistency, rather than continuously seeking for new behavior. It is important to note that with time, individuals do not only learn to function within the business environment, but will seek to establish status and job stability within the organization by exploiting the organizational inefficiencies to their own advantage (Harris 2006, p. 37). If a proposed change is threatening this stability it will be interpreted as a risk, and it naturally cause resentment

and resistance among employees. The latter source of resistance is the perception of different risks relating to the change. These risks can be related to social and economic factors, performance uncertainty or perceived side effects of the change (Sheth 1981, p. 276).

Some managers react to resistance with force. Their aim is to control, stop and terminate it. This response does not work, because it resists resistance. It is a defensive reaction to a defensive action. (O'Conner 1993, p. 31.) In academic literature, two main approaches to managing resistance to change are given; reducing the resistance and accelerating the driving forces. Lewin (1947) recommends reducing the hindering forces, rather than increasing the driving forces. Bartoli & Hermel (2004, p. 418) agree with Lewin and add that solely increasing the driving forces is likely to cause major blocks in the organization, as the concerns of the resisters are not taken into account.

The best approach to managing resistance seems to be an open and honest dialogue with the resisters, where their concerns are heard and addressed. To reach a common understanding of the problem and solution, employees should be encouraged to express different opinions about the change (O'Connor 1993, p. 31). This can be achieved by empowering people, i.e. by involving them in the change process.

Regardless of the type of change, project managers will likely encounter some form of resistance towards it (Burchell 2011, p. 20). Hence, the majority of BCM models are developed with the purpose of tackling this resistance.

2.3. Change management models

A change management process facilitates and enables the implementation of a desired change. Processes are generally constructed and presented in the form of a model, which can help to understand or depict reality. Yet, models are never totally accurate or correct presentations of reality. There has been a significant amount of literature written around change management models and frameworks. The aim in this thesis is not to conduct an in-depth analysis of the existing models. Yet, some of the most useful ones, chosen by the author, are briefly introduced.

The literature is dominated by planned and emergent change management methods and models (Bamford & Forrester 2003; Burnes 2004a; By 2005). Kurt Lewin first introduced planned change management in the late 1940s. He developed a model that is based on three phases; unfreeze, change, refreeze (Lewin 1947; Lewin 1951, pp. 228-229). Lewin's three step model for planned change has provided the framework for BCM theories for over half a century. At high level, the majority of BCM models follows Lewin's three phases and are constructed in the form of a process or a set of steps (Hiatt & Creasey 2003, p. 13). The planned approach is seen relevant when managing changes as projects.

In this approach, management prioritizes the planning of the change: a clear methodology is defined and people in charge of the change project should be well informed about the phases and checkpoints, roles, responsibilities and schedule (Lehmann 2010, p. 335).

In the 1980s, a new and different model for change appeared, which rejected the planned approach to change (Burnes 1996, p. 11). This fairly new approach is referred to as the emergent model of change. Emergent change continuously and rapidly adapts to market needs in a systematic manner, whereas planned change moves from one static phase to another. The emergent approach to change emphasizes that change should not be perceived as a series of linear events within a given period of time, but as a continuous, open-ended process of adaptation to changing circumstances and conditions (Burnes, 1996, p. 13). Accordingly, the emergent model of change focuses strongly on building capabilities to manage ad hoc changes. Table 2.1 summarizes the differences of the planned change and the emergent change approaches.

Table 2.1. Summary of the differences of planned and emergent change

| | PLANNED CHANGE | EMERGENT CHANGE |
|-------------|--------------------------------|-------------------------------------|
| Purpose | Maximize economic value | Develop organizational capabilities |
| Leadership | Top-down | Participative |
| Focus | Structure and systems | Culture & behavior |
| Planning | Programmatic | Emergent |
| Environment | Rather stable | Turbulent |
| Scope | Small scale – localized change | Organization-wide |

The distinction between emergent and planned change is not always easy. Moreover, there does not seem to be a clear consensus even in the academic literature. For example, Burnes (2004a) describes Kotter's 8 steps model as an example of a model for planned change, whereas By (2005) uses it as an example of a model for managing emergent change. In this thesis Kotter's mode is seen as a model for planned change, and it will be presented later in this chapter.

Although there are countless models already developed, organizations usually build or tailor their own BCM model to best suit their specific needs. Usually these organization specific models are adaptations of the most known theories in the field. Probably the most known model is Kotter's 8 steps model (Kotter 1996). Other well-known models include Lewin's three step model (Lewin 1951), ADKAR (Hiatt & Creasey 2003), Rogers' technology adaptation curve (Rogers 1962), Kübler-Ross's five stages model (Kübler-Ross 1969), Burke-Litwin's 12 organizational dimensions control (Burke & Litwin 1993)

and Weisbord's six-box model (Weisbord 1976). None of the models, or the school of thought each presents, have proven to be the best or even better than others. A good change management approach is not achieved by following one school of thought, but by understanding the circumstances around the phenomena, and adapting according to the needs and the context of the organization (Paton & McCalman 2000, p. 23; Newton 2007, p. 10).

The majority of the existing BCM models (planned or emergent) can be criticized for giving too much attention on top-down change, being vague on the details on how to establish vision, direction and strategy, providing too much emphasis on the corporate hierarchy as a tool for the change implementation and playing too much to the "old boy network" as an instrument for change (Rothwell et al. 2009, p. 68).

Albeit the theory and practice of BCM are closely linked, academic literature tends to avoid the terminology of practical management tools and techniques (Hughes 2007, p. 37). Academics refer to tools and techniques at a very abstract level, without giving concrete examples (Hughes 2007, p. 40). Despite the huge volume of published articles on BCM, there is very little specific and concrete information on what could practically be done to manage change (Clarke & Garside 1997, p. 538). Therefore, one of the main challenges in this thesis will be constructing a BCM model with concrete tools based on abstract literature,

2.3.1. Step models

Step models have their roots in the planned approach to change. These models view change as something intentional that needs to be directed by top management. Step models are best suited to rather stable and predictable situations where change can be driven from the top (Burnes 1996, p. 16). Top-down change is characterized by strong leadership and little dialogue, in contrast to bottom-up change, which is driven by employees (Burnes 2004b, p. 324). Lewin is often seen in the literature as promoting the top-down approach to change, and ignoring situations requiring bottom-up change (Burnes 2004a, p. 995). Kotter (1996) in a way integrates these views. He views change as initiated by top management and driven by a strong common vision, yet the actual change happens mostly due to empowered employees.

Planned change involves a good deal of learning, and it is closely connected to the learning organization theories of Argyris and Senge (Nadler & Tushman 1989; Paton & McCalman 2000). Thus, the planned approach to change lies at the heart of organization development, which is concerned with longitudinal organizational change (Bullock & Batten 1985; Burnes 1996).

Probably the most well-known step models are Lewin's 3-step model and Kotter's 8 steps model presented next. In order to understand planned change, it is not sufficient merely

to know the processes which bring about change; there must also be an understanding of the states that an organization must pass through in order to move from the present state to a desirable future state (Burnes 1996, p. 12).

Lewin's 3-step model (unfreeze, change, refreeze)

Kurt Lewin's work on field theory, group dynamics and action research, together with his 3-step model, form an integrated and robust approach to planned change (Burnes 2004a, p. 978). The 3-step model (Lewin 1947) is often cited as his key contribution to change management.

The model starts with the **unfreezing** phase, which recognizes the need to discard old behavior, structures, processes and culture before successfully adopting new approaches (By 2005, p. 373). The unfreezing phase includes preparing the organization to accept that change is necessary. This involves breaking down the existing status quo for example by developing a compelling message, establishing a sense of urgency among employees, persuading stakeholders and forming a powerful coalition to ensure support and commitment to changes. The unfreezing of the present state may involve quite different problems in different organizations. To break open the sense of security and self-righteousness, it is often necessary to bring about an emotional stir up (Lewin, 1947, p. 229). The most difficult temptation to avoid is pushing the implementation stage too early. Bypassing the early unfreezing stage, the change becomes purely cosmetic and very expensive in the long run, because it means that everything has to be done again, properly, at a later stage (Plant 1989, p. 15).

The **change** phase is where employees begin to resolve their uncertainty and look for ways to adapt. During the change phase, people start to believe and act in ways that support the new direction. This phase includes setting clear objectives and challenging targets, empowering action, involving people and using training, coaching, and role models who can help make the transition successful (Klein 1996, p. 41). As employees adapt, mistakes should be both accepted and expected. Business changes are not smooth, natural transitions, but periods of considerable turbulence and unnatural activity, which require careful and skillful managing (Plant 1989, p. 15).

The final phase, **refreezing**, calls for the new methods, procedures, thought patterns, and behaviors to be anchored permanently into the organization. Lewin (1947) recognized that, without reinforcement, change could be short-lived. Yet, the need to reinforce continually and institutionalize the change by a variety of means gets forgotten easily (Plant 1989, p. 16). The aim is to prevent individuals and groups from regressing to their old behaviors. This phase includes collecting and processing feedback, ensuring management support, providing information and training, and celebrating success (Harrington et al. 2000, p. 126).

Each of the different phases will vary enormously in time. Sometimes the refreezing phase may take several years. Lewin's 3-step model is very general and easy to understand, but the steps themselves are not easy to implement and the model does not offer any support to the practical implementation (Salminen 2000, p. 62). In an attempt to elaborate on Lewin's three step model, many authors have expanded the number of steps or phases (see e.g. Nadler & Tushman 1989; Newton 2007). Lewin's approach is still relevant to the modern world, and his three phases influence the perceptions of change management by academics and practitioners until this day (Bamford & Forrester 2003; Newton 2004; Burchell 2011).

Kotter's 8 steps model

Kotter's 8 steps model is possibly even more famous than Lewin's model, and is presented here. Kotter's model is based on a study of change in over one hundred organizations of different sizes and industries. Kotter's model is intended to help change leaders avoid common mistakes in managing change. The model consists of 8 steps, which should be followed strictly in their following order:

- | | | |
|---|---|----------|
| 1. Establish a sense of urgency | } | Unfreeze |
| 2. Create a guiding coalition | | |
| 3. Develop a vision and a strategy | | |
| 4. Communicate the change vision | } | Change |
| 5. Empower broad-based action in the organization | | |
| 6. Generate short-term wins | } | Refreeze |
| 7. Consolidate gains and produce more change | | |
| 8. Anchor the new approach in the culture | } | |

Successful change implementation generally starts with the creation of a sense of urgency right at the limits of tolerance (Nadler & Tushman 1989, p. 199). The model continues by creating a guiding coalition to support the vision and strategy. The first 3 steps are basically about creating the motivation for change in the organization and decisiveness in top management. According to Kotter (1996), for change to be successful, 75 percent of the company's management needs to 'buy into' the change. Thus, the three first steps require a significant amount of effort. They can be linked to Lewin's 'unfreezing' phase, as they are also about creating the climate and conditions for change. Kotter emphasizes the importance of a shared vision and a strategy (Gill 2003, p. 312), as a shared vision both clarifies the direction of the change as well as motivates employees. And, without a strategy, the vision is nothing more than a dream.

Step 4 is about creating strategic clarity by communicating the common vision and strategy for the change. Communication is a crucial part of getting the buy-in from employees, and it should be done often, openly, honestly and in all possible occasions

(Gill 2003, p. 309). Step 5 and step 6 are mostly about managing the resistance to change and motivating employees further. Involving employees and addressing their concerns is a powerful tool for removing the obstacles to change. Empowerment is about encouraging and making employees able to do what needs to be done. Whereas nothing motivates more than success. Therefore celebrating success, especially short-term wins of the project, is a critical component of change management and can have a big uplifting effect on the whole organization (Hiatt & Creasey 2003, p. 73). Short-term wins justify the investment, turn neutrals into supporters and make the change concrete (Kotter 1996, pp. 120-124). Steps 4-6 are fundamentally about executing the change in the organization.

The last steps, step 7 and 8, link to the 'refreeze' phase of Kotter's model. The last steps ensure that the change is sustained. Kotter (1996) argues that many change projects fail because victory is declared too early. Thus, the last steps should not be ignored. Even after the project deliverables are implemented, the communication and the monitoring should continue, so that the change is truly anchored in the behavior, values and culture of the organization.

2.3.2. Emergent models

Lewin's model dominated the BCM field and management practices for several centuries. Yet, as stated previously, the rate of change is constantly speeding up, consequently also the views on change and management best practices are changing. Lewin's planned approach to change began to attract criticism in the 1970s due to its group-based, consensual and relatively slow nature (Burnes 2004a, p. 988). This criticism resulted in a different view on change, and the emergent model of change was born.

The critics of Lewin's model often argue that the number of variables changing at the same time, the magnitude of change, and the frequent resistance of employees create a collection of processes that are extremely difficult to predict and almost impossible to control (Burke & Litwin 1993, p. 523). In addition, it is often stated that Lewin's model is only relevant to incremental and isolated change projects and is not able to incorporate radical, transformational change (Burnes 2004a, p. 993). Thus, planned change and the step models were seen too simplistic and mechanistic for a world where change is a continuous and open-ended process (Burnes 2004a, p. 992).

The emergent change is closely connected to the theories of continuous improvement and total quality management. It has its roots in the late 1970's, in the models originating mostly from Japan and often called Japanese management philosophies (Salminen 2000, p. 68). The school of emergent change challenged the planned approach to change by stating that there is no situation where the organization is completely frozen (Burnes 2004a).

The advocates of emergent change also argue that the planned approach fails to recognize the complexity of organizations (Pugh 2007, p. 30), whereas the emergent approach takes a holistic and contextual view of the environment, recognizing the informal structures as well. In the emergent approach, the result of the change is an outcome of a number of smaller adjustments throughout the organization. Managing change is less about making detailed plans and projections, and more about reaching an understanding of the complexity of the issues concerned and identifying the range of available options (Burnes 1996, p. 13). Change is not seen as an ordered, rational and linear process, but instead there is an emphasis on change as a continuous process, which is heavily influenced by culture, power and politics (Burnes 2004a, p 990).

The emergent model is designed for unpredictable and rapidly unfolding situations where it is impractical, or even impossible, to drive change from the top (Burnes 1996, p. 16). The emergent model focuses on building the organizational software, culture, behaviors and attitudes. The change spreads from the bottom up, and the structural change will follow once the culture has changed. (Beer & Nohria 2000.) Thus, the emergent approach to change is more concerned with change readiness and facilitating change than providing specific planned steps for each change project and initiative (By 2005, p. 375). The emergent model tends to see change as driven from the bottom-up rather than from the top-down, and stresses that change is an open-ended and continuous process of adaptation to changing conditions and circumstances (Burnes 1996, p. 13). Emergent change also views change as a process of learning and not just a method of changing organizational structures and practices.

The emergent approach may seem very suitable for modern organizations. There is however a problem with addressing success and failure in the emergent change model. It seems to be unclear whether a change project can be said to have failed, since it is constantly growing and adapting to new circumstances that arise. Likewise, it is hard to proclaim success, as there are generally no outspoken objectives or plans. In addition, there are very few actual models developed for managing emergent changes. The academic literature of emergent change suggests some sequences of actions that organizations should comply with. Nevertheless, the models and concrete actions tend to be rather abstract and difficult to apply (By 2005, p. 375). Kanter et al.'s Ten Commandments for Executing Change (Kanter et al. 1992) is presented next, and it is one of the few widely recognized models for emergent change.

Kanter et al.'s Ten Commandments for Executing Change

In their book, Kanter et al. (1992), present a list of ten commandments for executing organizational changes successfully. This list has been described as an example of emergent change, which supports moving the organization towards change readiness (By 2005, p 376).

Compared to Kotter's (1996) 8 steps model, 6 of the steps or commandments are very similar and have been explained earlier. Therefore only the bolded commandments in the list, which differ from Kotter's model, are described here in more detail. Even though many of the steps are similar, Kotter's model is considered more as supporting the top-down approach, whereas Kanter et al.'s model is purely a bottom-up model. The commandments in Kanter et al.'s (1992) list are given here:

- 1. Analyze the organization and its need for change**
2. Create a vision and a common direction
- 3. Separate from the past**
4. Create a sense of urgency
- 5. Support a strong leader role**
6. Line up political sponsorship
- 7. Craft an implementation plan**
8. Develop enabling structures
9. Communicate, involve people and be honest
10. Reinforce and institutionalize change

Kanter et al.'s (1992) list of commandments starts with analyzing how the organization will be affected by the proposed change in order to craft an effective implementation plan. Managers should establish an understanding of the organization's processes, its environment and its strengths and weaknesses.

The 3rd commandment can be interpreted as disengaging from the past and awakening to a new reality (Kanter et al. 1992). It is difficult to embrace a new vision until the old and dysfunctional structures and routines have been isolated (Klein 1996, p. 40).

The 5th commandment emphasizes that an organization should not undertake something challenging and large without a leader to drive and inspire the change (Gill 2003, p. 309). This strong leader also plays a critical role in communicating the new vision and motivating employees.

The 7th commandment recognizes that an organization also needs a more concrete plan on what, when and how to execute change. However, the plan should be flexible and allow to make adjustments along the change process, as everything cannot be known at the beginning (Harrington et al. 2000, p. 318).

2.4. Summary

Change in organizations is a multi-dimensional process. It can be driven by internal or external forces, and it can have an impact on one team or on the whole organization. Changes can be incremental improvements or can aim for radical transformation. Change can be responded to both reactively and proactively.

Business change management focuses on improving the performance of an organization through guiding people through the change process. It is a way of improving stakeholder satisfaction by managing expectations, involving employees and managing the resistance to change. Hence, project managers, and IT project managers in particular, need basic business change management skills to manage their projects more successfully.

Business change management is not an isolated component or one phase of a project. Although it is most visible in the implementation phase, business change management should be practiced continuously during the whole project to help preventing possible failures (Newton 2007, p. 12). In IT projects, BCM activity is too often initiated when the IT component is already delivered, in reactive rather than proactive mode (Ward & Elvin 1999, p. 198). This is already too late, because BCM cannot be applied as a quick fix in the end of the project as then it fails to address the implications for the whole organization (Gill 2003, p. 308). This in turn can have unwanted and unforeseen consequences.

To manage change and control these unwanted consequences, organizations are using various change management models. Academic literature offers a wide range of different models. These models can be generally divided into step models for managing planned changes, and emergent models for managing emergent, ad hoc, changes. However, there is no consensus among the academics or practitioners on the best model for managing change. In addition, when managing an organization specific change project, the business change management model should be tailored to suit the project management practices of that organization.

The next chapter will introduce the IT project management methods and practices used in the target organization, and examine the connection between IT project failure and business change management activities.

3. IT PROJECT MANAGEMENT

IT change projects differ from traditional organizational change initiatives, because IT is so prominently involved everywhere in the organization (Markus 2004, p. 5). Nowadays IT projects and organizational change are so interlinked that there are very few IT projects that are not triggered by or do not result in organizational changes.

According to Ward & Elvin (1999, p. 198), IT can relate to organizational change in numerous levels: change may need IT to initiate it, facilitate it, support it or IT can cause unexpected changes to occur. Burchell (2011) simplifies this relation between IT and organizational change by introducing two distinct ways to look at it. He argues that there are organizational change initiatives that are considered IT-specific and those projects that are not specific to IT, but must involve IT in order to be successful (Burchell 2011, p. 20). Traditional projects, like organizing an event, do not necessarily cause changes in the organization, but they normally require IT to be successful, whereas IT projects in most cases have a genuine change impact on the organization. This is because IT is a ubiquitous and inseparable part of the processes, culture, structures and ways of working of a modern organization. However, much of the extensive literature on organizational change does not mention IT (Markus 2004, p. 5). This thesis attempts to combine the theories of change management and IT project management to come up with a practical way of managing and deploying change in IT projects.

Projects contribute to the organizational memory (Bamford & Forrester 2003, p. 560), a legacy that will affect future change initiatives through established ways of working and lessons-learned. In other words, change management and project management experienced by an organization will shape the way this organization manages changes as projects in the future (Lehmann 2010, p. 334). This is important to keep in mind especially when trying to change the way change is managed. Therefore, a good understanding of the target organization's IT project management methodology and project culture is needed in order to develop the BCM model.

3.1. What is IT project management

In this thesis, an IT project refers to a project (see project definition below), which includes changes to the IT infrastructure, tools and platforms, or rules and processes of using them. According to the Project Management Institute (2014), project management is "the application of knowledge, skills and techniques to execute projects effectively and efficiently." Although IT projects are very similar to other projects, they seem to have been studied separately in the academic literature. Nevertheless, the basic project management standards apply to IT projects as well.

Projects are normally divided into phases, e.g. initiation, planning, execution and closing, though these phases may vary according to the used project management methodology. Different project management methodologies will be described later in this chapter.

Companies can have hundreds of simultaneously ongoing information technology (IT) projects, which occur all over the organization and are usually triggered by the organization's strategic choices. Figure 3.1 illustrates the connection between operative level project management and corporate level strategy. The actual execution of an organization's strategy takes place in the operative level, through projects. Projects produce quality deliverables and are generally managed in programs (Young 2013, p. 15). Programs are structures that help to ensure that right actions are taken in a single project. In large companies programs and separate projects are further managed in portfolios. Portfolio management includes identifying, prioritizing and controlling projects and programs to ensure the alignment with organizational strategy.



Figure 3.1. *Aligning operative level project management with corporate level strategy*

In essence, project management is a generic term for accomplishing large, one-time tasks (projects) within a given time and budget, and doesn't deal with the content of the tasks (Salminen 2000, p. 79). A successful project is able to deliver the quality and functions originally agreed upon on schedule and within the budget. Nowadays success is not only a matter of time, cost and quality. Stakeholder satisfaction is also of high importance, especially within IT projects, because they involve great potential impacts on the users via changed processes, tools and organizational performance (Lehmann 2010, p. 332).

In order to manage an IT project successfully, both the technical and the human issues have to be considered. A well-planned and technically well-managed project will not succeed, if the behavior of people and their response to change is not included in the project plan (Martin & Cheung 2002, pp. 460-461). A successful change project includes three critical elements; leadership, project management and change management. Figure

3.2 illustrates the connection between these three elements. Inside the triangle are the general goals of managing any kind of projects and the corners are the three critical elements for managing a change project.

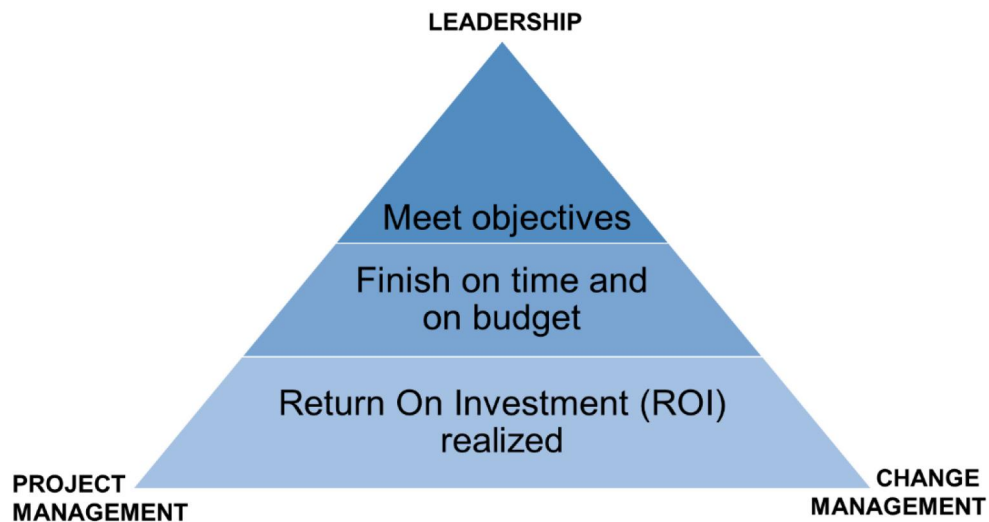


Figure 3.2. Components of a successful change project (adapted from Prosci 2014)

Leadership is providing governance, strategy and direction, project management is targeting the technical side of a change project and change management is ensuring that the people side of change is taken care of. All three corners are complementary, and the project will struggle to survive if one of the three components is absent (Prosci 2014).

3.1.1. IT projects as vehicles of change

To fully integrate change into a project is not an easy journey (Lehmann 2010, p. 328). Albeit project management approach has been identified as one of the success factors in change management and significant research has been conducted in both the business change management and IT project management literature, there has been little engagement between the two. A large gap exists between the conceptualizations in change management and in project management (Lehmann 2010, p. 328). Consequently, there are relatively few publications about the role of project management in business change management (Salminen 2000, p. 80). In addition, Gareis & Huemann (2008, p. 771) state that there is very little recognition in the BCM community of the value of project management in implementing changes.

Projects support a clear, timed and structured approach to implementing changes, which should give users time to absorb the needed information and adapt to the change in time. An IT change project requires a project management structure with clear goals and defined responsibilities (Martin & Cheung 2002, p. 461). Although projects are undertakings with a clear structure, scope and limited time, change is a multi-phased process, not an event (Plant 1989, p. 15), and should be managed as such.

Despite the primary motives for most change initiatives being strategic, the actual execution of change takes place in the operative level, through projects (Salminen 2000, p. 9). A project is more effective in delivering change when it is driven by a clearly defined objective, and when it has a defined end point (Newton 2007, p. 11). Projects are temporary undertakings with a specific scope, objectives, goals and structure, and that is why they are the most suitable vehicles of change. Projects allow different roles, responsibilities and tasks for employees, which in turn allow them to question and change the frozen norms. A functional organization, on the other hand, cannot easily change its ways of working, because it is bound to execute its day-to-day operations, e.g. taking orders, preparing production, billing or delivering goods (Galoppin & Gaems, 2007, p. 85). Hence, employees do not have time to question their existing ways of working and come up with new ways to improve efficiency.

Figure 3.3 summarizes the main differences between the day-to-day operations of a functional organization and the unique undertakings of a project organization. A functional organization executes its operations normally in a predefined top-down hierarchy, whereas a project organization is more flat and aims to achieve something unique, i.e. to drive the organization forward. Projects are therefore illustrated inside a horizontal arrow, and operations inside a vertical arrow.

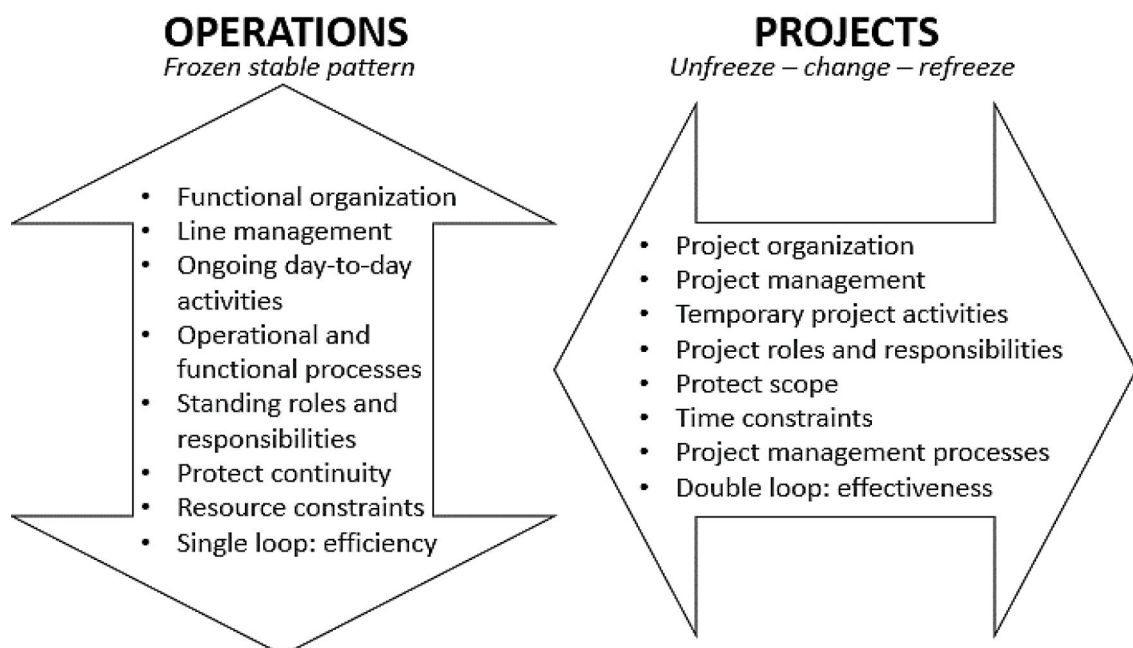


Figure 3.3. *Operations vs. projects (Adapted from Galoppin & Gaems, 2007, p. 86)*

IT changes in particular are good to deliver in project form (Newton 2007, p 11), and project management and change management should be approached hand in hand (Hiatt & Creasey 2003, p. 76). However, merely adding IT project management and change management approaches together does not produce the best results. Firstly, the additive approach does not effectively address many of the problems that can arise over the long

process of a typical lifecycle of a change project. Secondly, the additive approach is not structured to produce the characteristics of a proper change, a complete intervention consisting of IT and complementary organizational changes, i.e. an implementable solution with minimal misfits with the existing organization. (Markus 2004, p. 4.)

Although IT is nowadays probably one of the biggest contributors in organizational change (Burchell 2011, p. 26), not everyone believes that using IT to drive organizational change needs a special approach. Many technical specialists and consultants sincerely believe that good IT project management is the answer to success. Yet, experts estimate that as many as 75% of organizational change efforts involving technology fail because of employees' negative reactions to changes in their work, organizational business processes, and the technology they use. (Markus 2004, p. 5.) Despite the fact that people and process problems may manifest technically, IT projects almost never fail because of technical issues (Kappelman et al. 2006, p. 32). A lack of consideration for the people side of change will likely result in project failure even though the technical side of project management is handled well. Therefore, business change management is a critical factor in the success of an IT project, as it deals with the most important, most unpredictable aspect of the implementation process, the people (Harris 2006, p. 38).

This thesis does not go deep into IT project management theory, as the aim is rather to form a basic understanding on the link between IT project management and BCM activities, as well as to describe the project management methods used in the target organization. The next section will shortly introduce the two main approaches to project management, the classical waterfall project management model and the agile project management model. Both of the project management models used in the target organization follow these approaches, and will be presented also to better understand the IT project management reality in the target company. This understanding is vital when designing the BCM model, as the phases of the BCM model need to be integrated to the project management methodology.

3.1.2. Waterfall project management

Traditional project management is a linear approach, which involves the application of disciplined and deliberate planning and control methods. It assumes that events are predictable and all activities are well understood. The aim is to get everything ready at once by planning a significant part of the project upfront. (Hass 2007, pp. 1-6.) The traditional model is called the waterfall model, and it has evolved into several variations used in different industries. This section will first shortly introduce the classical waterfall model and then look at how it is applied in the target organization.

The waterfall model, developed in the late 1960s and early 1970s, is still widely used in IT project management (Jurison 1999, p. 12; Hass 2007, p. 2). It reduces project

complexity by breaking the project into a series of successive steps or phases. The waterfall model views projects as a manufacturing process, where the completion of one phase leads to the start of another. The start and termination point of each step is clearly defined, and has a distinct set of deliverables, e.g. requirements documents, design specifications, test plans or manuals. (Liu & Horowitz 1989, p. 1280.) The waterfall model is often shown with back-and-forward-pointing arrows, to emphasize that the model is not precise, and that previous phases may be returned to (Royce 1970, p. 330). A simplified version of this model, which is applied to business context, is shown in Figure 3.4.

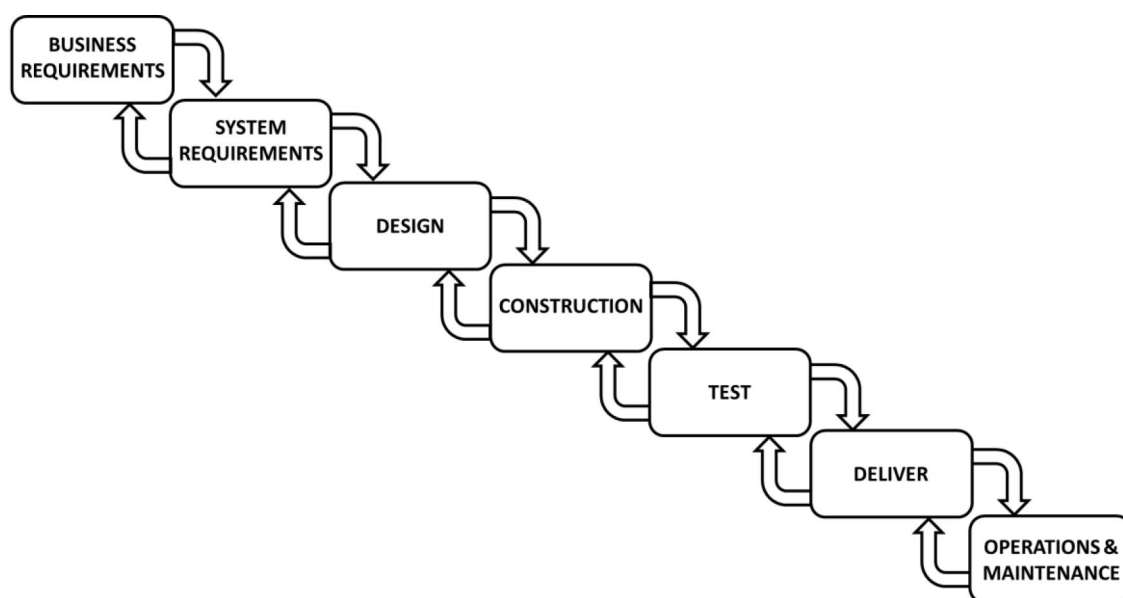


Figure 3.4. Simplified picture of the waterfall model (adapted from Hass 2007, p. 1)

The steps of this model differ from the original waterfall model, which was designed for software projects (see: Royce 1970, p. 338). Instead, the waterfall model in Figure 3.4 has been adopted to suit a broader set of different business projects. As mentioned earlier, there are numerous variations of the traditional waterfall model. These models have varying amounts of steps and slightly varying names of their phases, but they are all called waterfall models due to their linear and disciplined nature.

The waterfall project management approach has been adopted in the target organization as well. They have developed their own methodology for managing IT projects based on its principles. Their waterfall model consists of four consecutive phases; initiate, plan, implement and finalize. Each of these phases starts and ends with a project gate decision (G0...G4). In addition, inside the implementation phase, there is an additional Go Live (GL) gate decision. Between the gates, there are several milestones and at each milestone, certain deliverables are produced, e.g., the project plan, progress reports or the final report. The waterfall project management model used in the target organization is presented in Figure 3.5.

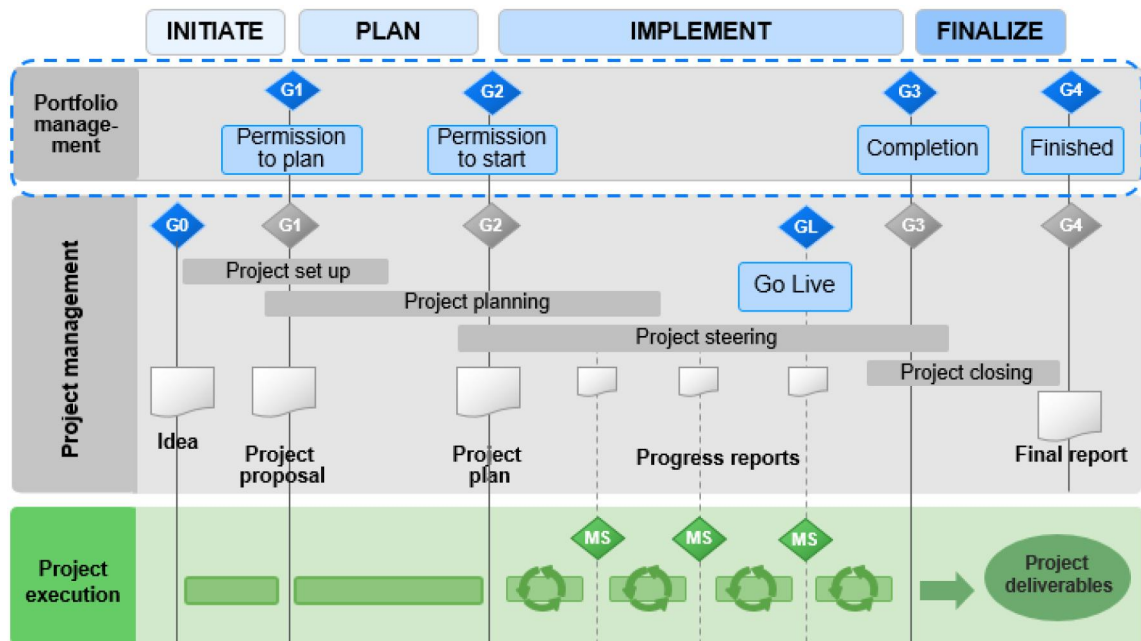


Figure 3.5. The waterfall project management model used in the target organization

As Figure 3.5 shows, this model follows the linear approach, it has a fixed order of events and phases, and it aims to make projects predictable and easily manageable by planning events and phases well ahead.

The reality of project management however is that there rarely is enough time to create the perfect plan, to analyze the options and to get buy-in from all the stakeholders (Chin 2004, p. 10). The project requirements are often elusive and subjected to a lot of changes. Thus, the traditional waterfall project management methods can be inefficient for projects involving a significant software component (Hass 2007, p. 3). The traditional methods can be cumbersome also in other fast-paced and uncertain environments, as the speed at which the social and business environments change, requires all organizations to be agile, i.e. to be flexible in their plans and actions (Dinsmore & Cabanis-Brewin 2014, p. 442). This has at times resulted in criticism against the traditional waterfall model and caused a demand for more agile methods, which will be described next.

3.1.3. Agile project management

Agile project management is often associated uniquely with software development projects. However, it has spread outside software projects as a consequence of a need for increased flexibility in managing projects.

Completing projects faster is a universal desire of all project managers. Agile does not equal fast, however, speed is a central characteristic for agile project management (Chin 2004, p. 9). In the past years, organizations have become increasingly aware that software is not the only area that could benefit from agile project management practices (Dinsmore

& Cabanis-Brewin 2014, p. 441). Therefore, agile project management is nowadays widely used in all kinds of projects that are managed within a dynamic business environment and have unclear or rapidly changing requirements.

There exists a variety of different agile methodologies, i.e., XP, DSDM, kanban, lean, crystal and scrum. These methodologies share much of the same philosophy and characteristics. Yet, from an implementation standpoint, each has its own practices, terminology and tactics. Scrum is probably the most known and the most widely used agile project management framework. Scrum challenges the traditional sequential way of managing projects, and recognizes that not everything can be planned well ahead. It was inspired by the shortcomings of the waterfall model and it focuses on communication, collaboration and enabling the project team to rapidly respond to emerging requirements. The Scrum framework is also used in the target organization, and will therefore be described here.

Scrum

Scrum is a formal agile project management framework developed by Jeff Sutherland and formalized by Ken Schwaber. The activities in scrum include sprint or iteration planning, sprint, sprint review, sprint retrospective and scrum meeting. Scrum starts with a sprint or iteration planning, during which the entire scrum team plans the work to be performed in the upcoming sprint. (Rising & Janoff 2000, pp. 30-32.) A sprint normally lasts 2 to 6 weeks and once the sprint begins, its duration is fixed and cannot be shortened or lengthened. The sprint consists of daily scrum meetings, development work, sprint review and sprint retrospective. (Scrum.org 2014.) During a sprint, the work decided in the scrum planning is completed and no changes are allowed from outside the team (Chin 2004, p. 10). Every working day, there is a 15-minute daily scrum meeting, where each member briefly describes their tasks and possible problems. In the sprint review, the current sprint, in terms of tasks achieved, is reviewed and assessed against the sprint goal determined during the sprint planning meeting. The sprint retrospective occurs after the sprint review and prior to the next sprint planning. The sprint retrospective is an opportunity for the team to inspect the working process of the past sprint and suggest improvements for the next. (Dinsmore & Cabanis-Brewin 2014, p. 445.)

There are several roles defined in the scrum framework: the product owner, the scrum master and the development or scrum team. The product owner is responsible for maintaining the correct business perspective and scope. He or she is the sole responsible for managing the project backlog (see below). The product owner prioritizes the items in the project backlog and ensures the project team understands the items. The scrum master works together with the product owner, leads the scrum team and facilitates the scrum events. The scrum master plans the scrum implementations within the organization and makes sure it is understood in the team. The scrum team is self-organizing and cross-

functional. It should contain about seven (+/- two) members for optimal performance. The team is responsible for building what is needed in the sprint and demonstrating the outcomes. (Scrum.org 2014.)

The artifacts produced in the scrum framework are; the project backlog, the sprint backlog or the iteration backlog, and the burndown chart. The project backlog is a prioritized list of different requirements, functions and features that are required for the project outcome. The project backlog is dynamic and evolves as the project goes on, and is maintained by the product owner. The sprint backlog or the iteration backlog refers to a set of items from the project backlog that are selected for the current sprint. In addition to these items, the sprint backlog contains a plan for realizing the sprint goal. The team modifies the sprint backlog throughout the sprint, and the final sprint backlog emerges during the sprint. The project burndown chart shows the total work remaining in a sprint and it is used to check the status of the project or deployed product. (Rising & Janoff 2000; Dinsmore & Cabanis-Brewin 2014.) Figure 3.6 presents the scrum framework described above.

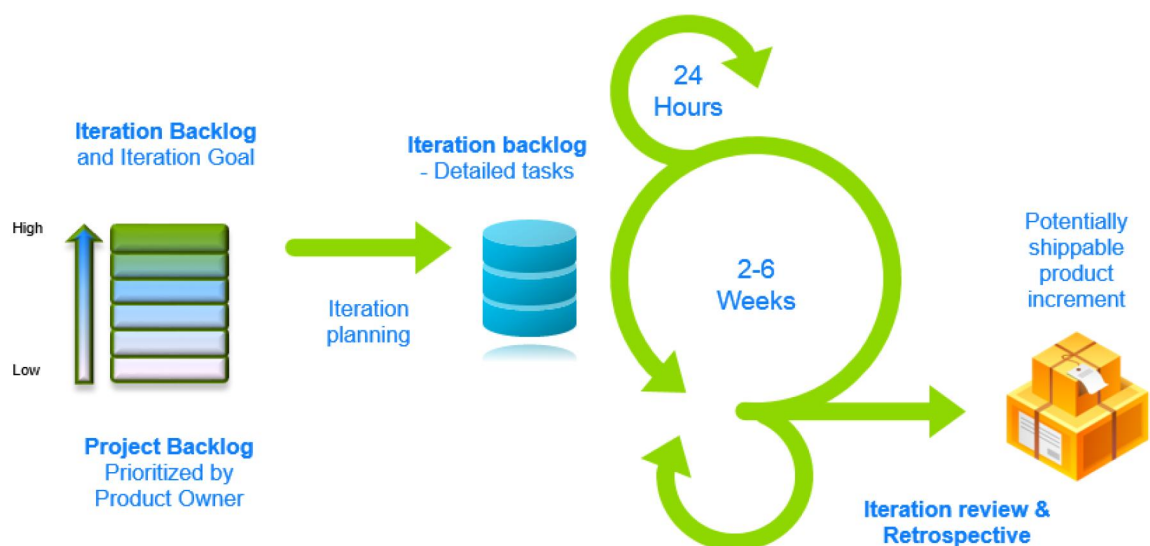


Figure 3.6. The scrum framework

The target organization of this thesis utilizes agile project management methods in certain business units and projects. Their Agile Project Model (APM) is an alternative for the more known waterfall project management model. The APM consists of the roles and iterative methods of the scrum framework, and a well-known portfolio management framework. It has the same decision-making gates and high-level phases as the previously introduced waterfall model. The main difference is in the implementation phase, which is executed in iterations. The projects managed according to the APM fit into a normal project portfolio, as the high level view to the project is similar to the projects that are managed in the traditional way.

The APM used in the target organization is presented in Figure 3.7. It is a framework that combines traditional plan-driven methods with agile thinking and best practices. The

project owner or the nominated product owner creates the project charter (a statement of the scope, objectives, and participants in a project) to have the authority to apply organizational resources to project activities. The product owner creates the project plan and the high-level release plan (roadmap for iterations) based on project requirements. The high-level release plan is updated and revised throughout the project life cycle. The iteration backlog for iterations 1...N will be generated in the iteration planning meetings. The product owner is responsible for maximizing the return on investment of the project by prioritizing the work that needs to be done in the agile project team.

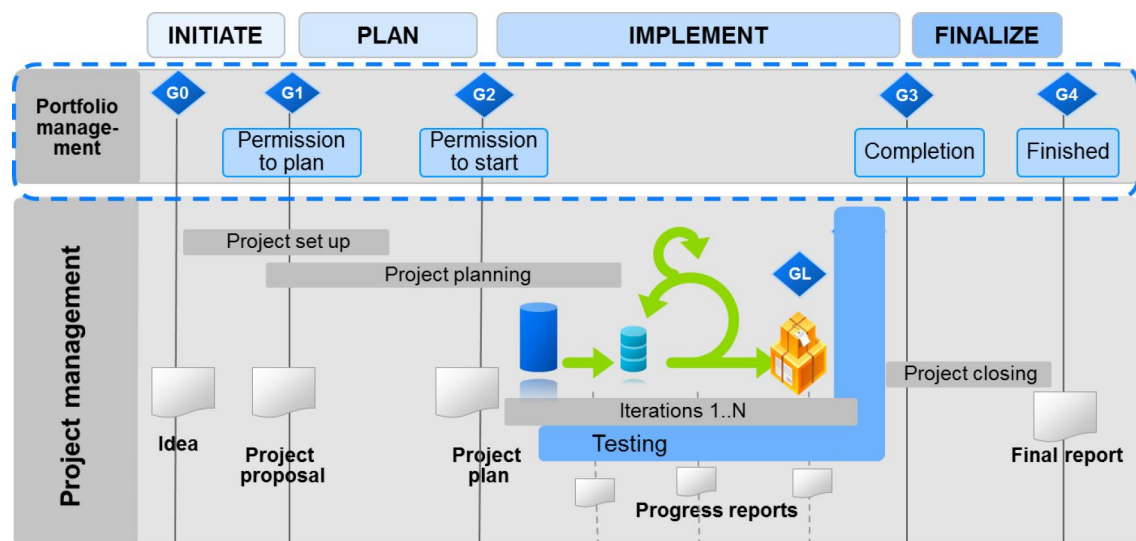


Figure 3.7. The Agile Project Model used in the target organization

The project activities include implementation of the current iteration and planning of the coming iterations. The product owner is monitoring and controlling the project status and reports the progress to the project owner and portfolio management group. If appropriate, the deliverables of a single iteration can be deployed in a Go Live. When the project has proceeded to the last iteration, the project deliverables are ready for the user acceptance test. After the user acceptance test is successfully completed, the product is ready for deployment and handover. The portfolio management group is formally authorizing the termination of all project activities based on the final acceptance. A transition to maintenance is completed. The project is evaluated and the lessons learned are documented in order to profit from them in the next projects. Finally, the project team will be released.

3.2. Common causes of IT project failures

An average company spends about 4-5% of their revenue on IT, with highly IT-dependent companies, e.g. in telecommunication industry, spending easily more than 10% (Charette 2005, p. 45). As IT is one of the largest corporate expenses outside employee costs, failures with IT projects can become extremely costly. Which makes it even more

daunting that IT projects are notoriously famous for their budget overruns, delays and often fail to deliver the planned benefits.

Few people agree on exactly how to define project failure. The IT project management literature has a variety of definitions and distinctive examples on project failures. Definition of failure varies greatly by the type of project being studied and the stage of the project in its lifecycle (Pinto & Mantel 1990, p. 269). Checking whether the project met its goals is not an essential measure of success (Salminen 2000, p. 14). A change project can meet and exceed all the goals set for it, yet still fail to provide the company with better performance. Each change project must result in benefits for the organization. Otherwise there is no reason to initiate the project and it can be considered as a failure right from the start.

Table 3.1 presents the project success and failure rates from the past decade, where a successful project is delivered on time and within budget, and a failed project is canceled before its completion. The challenged projects, which are neither successful nor failed, but have experienced significant obstacles and were completed over time and over budget, are included separately in the statistics. Many other statistics do not differentiate between the failed and the challenged projects, and consider the challenged projects as failed. The data in Table 3.1 is collected by The Standish Group International from projects done in IT environments, and agree with the results of studies by other analyst and consultant companies.

Table 3.1. *Project success and failure rates (adapted from The Chaos Manifesto 2013)*

| | 2002 | 2004 | 2006 | 2008 | 2010 | 2012 |
|------------|------|------|------|------|------|------|
| Successful | 34% | 29% | 35% | 32% | 37% | 39% |
| Failed | 15% | 18% | 19% | 24% | 21% | 18% |
| Challenged | 51% | 53% | 46% | 44% | 42% | 43% |

Table 3.1 indicates that both failure and success rates have not experienced any significant changes in the past ten years. Even since the 1950s, when projects started to gain popularity as a form of executing work, the success and failure rates have not changed much, despite the vast amount of research dedicated to answering the following questions: “why do projects fail” and “how to prevent project failure”.

Whatever the actual failure rate may be, academics and practitioners all seem to agree that too many projects fail for one reason or another. One change project is introduced after another yet never fully implemented, and the barriers to successful implementation

are never identified. Therefore, mistakes are repeated in new change projects. (Harrington et al. 2000, p. 110.)

Charette (2005, p. 47) argues that the majority of IT project failures are predictable and avoidable. Kappelman et al. (2006, p. 31) support this view adding that long before the failure occurs, there are often significant symptoms or warning signs of trouble. Unfortunately, most organizations do not consider preventing failure as an urgent matter, and as such severely risk harming the organization (Charette 2005, p. 43). Some academics and project managers have adopted the belief that certain project failures are unique occurrences, and that the causes of failure are idiosyncratic to the company or to the project (Pinto & Mantel 1990, p. 274). These will not be considered in this thesis, as the focus is on the factors over which the project manager can exert some level of control.

Table 3.2 presents some of the most common early warning signs that predict project failures. Kappelman et al. (2006, p. 36) argue that knowing about, and paying attention to these warning signs early in the life cycle of a project, increases the probability of succeeding.

Table 3.2. *Warning signs of project failure (adapted from Kappelman et al. 2006, p. 34)*

| PEOPLE-RELATED RISKS |
|---|
| Lack of top management support |
| Weak project manager |
| No stakeholder involvement |
| Weak commitment of project team |
| Project team lacks knowledge or skills |
| Subject matter experts are overscheduled |
| PROCESS-RELATED RISKS |
| Lack of documented requirements or success criteria |
| No change control process (change management) |
| Ineffective schedule planning and/or management |
| Communication breakdown among stakeholders |
| Resources assigned to a higher priority project |
| No business case for the project |

Many of these warning signs, especially the people-related signs, e.g. stakeholder management, communication and top management support, can be directly linked to business change management activities. If these signs are neglected, they can easily become the actual reasons for project failure.

Failures almost never occur as a result of a single reason. For example immature technology or shareholder politics alone can rarely ruin a project. Often failures include

two or more reasons from Table 3.3 (Charette 2005, p. 46). Many of the reasons are interlinked and can cause a snowball effect, i.e. the reasons start fortifying each other. Poor project management can lead to an inability to handle the project's complexity and result in poor communication and poor reporting, which in turn can cause stakeholder politics and so forth. Thus, in the end it might be difficult to point a single reason for the failure, as the reasons are so interconnected and seemed to all cause it together. Therefore, it is important for both business managers and IT specialists to understand the early warning signs of IT project failures, and to recognize the proactive actions in project management to avoid possible failures in the future (Markus 2004, p. 5).

There are numerous lists, statistics and studies made by academics and consultants around the world about the most common causes of IT project failures. Although the identified causes of failure and their wording can vary slightly between different statistics, often they include most of the reasons in Table 3.3.

Table 3.3. *Common causes of project failure (adapted from Charette 2005, p. 45.)*

| |
|---|
| Poor project management |
| Unrealistic or unarticulated project goals |
| Inaccurate estimates of needed resources |
| Badly defined system requirements |
| Poor reporting of the project's status |
| Unmanaged risks |
| Poor communication among customers, developers, and users |
| Use of immature technology |
| Inability to handle the project's complexity |
| Sloppy development practices |
| Stakeholder politics |
| Commercial pressure |

Hiatt & Creasey (2003) asked the managers of failed and challenged projects, what they thought went wrong and why their project failed or run into major problems. They constructed a list of 5 of the most common responses to what project managers would do better next time, and ordered them as follows:

1. Engage sponsors better.
2. Start change management activities sooner.
3. Emphasize employee engagement and involvement.
4. Secure sufficient resources for change management.
5. Improve communications. (Hiatt & Creasey 2003, p. 129.)

Considering that the majority of reasons to change project failure are linked to human factors (By 2005, p. 370; Oakland & Tanner 2007, p. 573), it is not surprising that two of the answers mention change management. The list emphasizes the importance of business change management skills, i.e. managing the human side of change in projects.

As project managers play a central role in IT projects, they can be a major source of errors that lead to failure. Many project managers are sincerely interested in communication and human resource issues when attending seminars and trainings, but back in the field they seem to forget all about the softer side of project management (Salminen 2000, p. 86). Poor technical management can lead to technical errors, but those can generally be isolated and fixed. Whereas bad decisions and poor communication by project managers are one of the greatest causes of IT project failures today. (Charette 2005, p. 47.) If project managers had knowledge about the nature and causes of project failure, they could improve their ability to implement projects more successfully (Pinto & Mantel 1990, p. 269). Therefore, it is important for project managers to gain a better understanding of the reasons of project failure.

Project management in general has a crucial role in the management of product, service, and process changes in enterprises today. Most of the common project management methodologies, such as PRINCE2³, focus on the hard side of project management; processes, policies and procedures. Those methodologies mainly address the rational factors such as planning and control, and they do not take into serious consideration the soft factors, such as cultural aspects, change management or organizational adaptation. The soft factors are however equally as important as the hard infrastructure (Benjamin & Levinson 1993, p. 25).

Management seldom considers investing in developing the organization's soft infrastructure as important as developing the hard infrastructure, e.g. a telecom network. Because investments are heavily biased toward technology and not toward managing changes in process and organizational structure and culture, the benefits of IT projects are not being realized (Benjamin & Levinson 1993, p. 23). By treating change projects as if they were purely hard IT projects, organizations risk facing serious implementation problems and unintended consequences, as well as miss out on opportunities to benefit from IT-enabled organizational performance improvements (Markus 2004, p. 5).

3.3. Summary

IT projects are the most common change projects in organizations today. They require careful planning and skillful project management to be able to deliver the desired benefits.

³ PRINCE2 is an acronym for PProjects IN Controlled Environments, version 2. It consists of best practices and high-level project management and control methods. (See more: <http://www.prince2.com>)

Several different methodologies have been developed for managing IT projects. These methodologies can be divided into traditional waterfall project management methods and more modern agile project management methods. The main difference between them is in the implementation phase. In agile project management the implementation phase is executed in iterations, whereas in the waterfall methodology it is planned well ahead and managed according to that plan.

IT projects are essentially about change, e.g., they include changes to the IT infrastructure, tools, systems and platforms, or rules and processes of using them. Projects support a clear, timed and structured approach to implementing changes. They are temporary undertakings with a specific scope, objectives, goals and structure, and therefore they are the most suitable vehicles of change. As change has always an impact on the employees of an organization and human issues are often recognized as the causes for project failure, managing change in projects should take the people side of change into more serious consideration.

Managing a successful IT change project consists of skillful project management, leadership and change management. In order to manage IT projects successfully, both the technical and the human factors have to be considered. Therefore, integrating the change management principles of the BCM models into the IT project management methodology, could help the organization to benefit from IT-enabled organizational performance improvement efforts.

4. DATA COLLECTION AND ANALYSIS

This chapter will introduce the data collection methods and present a detailed outline on how the empirical part of this study took place. The data for qualitative research typically come from fieldwork, during which the researcher spends time in the organization where people can be interviewed, observations made and documents analyzed (Patton 2005, p. 1364). The empirical data of this study was collected using three complementary qualitative data collection methods:

- semi-structured one-to-one interviews,
- participant observation,
- document analysis.

The data collection phase lasted 5 months, from mid-April until mid-September, during which also the feedback on the preliminary versions of the developed BCM model was collected.

As the researcher did not have any previous employment in the target organization, the data collection started with an introduction period where the researcher familiarized herself with the company culture, ways of working and general practices. This intensive period started one month before the actual data collection began, and it was seen extremely useful to better understand and interpret the collected data.

4.1. Semi-structured interviews

The majority of the data gathered in this thesis was obtained via interviews with selected employees. Interviews are a part of most interpretive studies as a key way of accessing the interpretations of the organization's employees (Walsham 2006, p. 323). Interviews as data-gathering methods are flexible, yet time consuming. They involve direct verbal interaction with the respondent, which allows clarifying questions to be asked during the interviews. In addition, they also enable accessing direct information about employees' personal perspectives and experiences. (Hirsjärvi et al. 1997, p. 200.)

Generally, interviews are categorized based on how structured or formal they are (structured, semi-structured or unstructured interviews), and if they are conducted between two or more people (one-to-one, pair or group interviews). In this study, semi-structured one-to-one interviews were used, which means that the topics of the interview were decided beforehand, but strict formulation of the questions and their order was made on the spot (Hirsjärvi et al. 1997, p. 203). This interview type was seen flexible enough

to enable a comprehensive understanding to be formed, yet strict enough to fit into the timeframe of the research and the schedules of the interviewees.

The interviewees were selected comprehensively from the 3 organizational units; private customer, corporate customer and internal IT. They were selected based on their knowledge about BCM, their position in the company and their availability. All the interviews were recorded and transcribed in order to analyze them afterwards and to find answers to the sub-questions of the research. The interviews were summarized and translated into English. The most important parts were highlighted from the translated transcriptions, based on which the initial categorization of different themes was formed. This process was very time consuming and consisted of multiple cycles resulting in a large amount of material, which was further narrowed down, summarized again and reorganized in its themes; IT project management practices, evaluation of the old BCM practices and templates, obstacles for BCM, expectations and needs. When analyzing the interviews, remarks and insights from document analysis and participant observation were added to complement the analysis.

Both the business professionals and the IT professionals were included in the interviews to ensure diversity. The interviewees had participated in several projects in varying roles, such as project manager, project owner, business change manager, project team member and steering group member. They had been part of the project steering groups as well as the actual project teams. Therefore, they could provide information from various angles and different perspectives. The interviews were always adjusted to fit the role and the expertise of the interviewees. Interviewees who had mainly been involved in projects in the role of a project owner or as a member of the steering group, were asked questions about high-level objectives, resources and steering group's responsibilities. Whereas the project team members were asked more operational level questions about the practicalities of managing a project.

During this study 15 employees were interviewed, from which 6 were interviewed several times, first asking feedback and discussing face to face about the developed model. Feedback about the BCM model under development was requested from the other nine employees as well, who were interviewed only once. This one-way feedback was mostly received via email or phone.

Table 4.1 presents the titles and organizational units of the interviewees. The employees who were interviewed several times are bolded. Any other information regarding the interviewees is not given for confidentiality reasons. The interviews are numbered (i1...i15), and the numbers are used in the Findings chapter to refer to the interviews.

Table 4.1. *The interviewed employees*

| TITLE | UNIT | CODE |
|---------------------------|------------------------|------------|
| Change manager | Production (IT) | i1 |
| Head of department | Production (IT) | i2 |
| Project manager | Private customer | i3 |
| Development manager | Private customer | i4 |
| Head of department | Production (IT) | i5 |
| Senior project manager | Production (IT) | i6 |
| Senior project manager | Production (IT) | i7 |
| Director | Corporate customer | i8 |
| Manager | Corporate customer | i9 |
| Communications | Support services | i10 |
| Head of department | Production (IT) | i11 |
| Program manager | Production (IT) | i12 |
| Change manager | Production (IT) | i13 |
| Change manager | Production (IT) | i14 |
| Solution manager | Production (IT) | i15 |

The initial plan was to conduct all the interviews face to face. However, due to some location constraints, four of them were eventually conducted virtually. All interviews were conducted in Finnish and the duration varied between 35 and 60 minutes, the average length being 45 minutes. Naturally, the personality and the background knowledge of the interviewee had an effect on the length, as some simply gave longer and more elaborate answers than others.

The main research question and its sub-questions are never directly asked in the interviews (Yin 2009, p. 87). However, the research questions (*What kind of a business change management model suits the target organization's IT project management methods and project culture?*) were the basis for the interview questions. The broadly defined topics and questions asked in the interviews are presented in Finnish in Appendix 1. The translated version of the same interview questions can be found in Appendix 2.

4.2. Participant observation

Participant observation refers to a research method in which the researcher takes on a role in the social situation under observation. It provides real-time data and can help to obtain a better feel for the culture of the target organization. (Rothwell et al. 2009, p. 247.) The aim is to experience events in the same way in which the subject of the study experience those events. Participant observation can be applied for example through direct

observation, informal interviews, participation in the work of a team or by taking part in collective discussions. (Walsham 2006, p. 320.)

The main risk with participant observation as a data collection method, is that the observer can be biased and even affect the events happening in the organization (Yin 2009, p. 102). In this thesis, the researcher tried to reduce the bias by applying an open-minded yet critical approach to the observations and by using other complementary data collection methods in addition to participant observation.

In this study, the participant observation was conducted by being part of the organization, attending meetings where the BCM practices were discussed and serving as a consultant in business change management. Notes were written during the whole participant observation phase, starting in mid-April and ending in mid-September. The whole empirical part of the thesis was conducted in the target organization's facilities, which enabled making information-rich observations. Working in the target organization also helped in building credibility and trust within the company, which eases the adaptation of the findings later on.

The observer's involvement in the organization can be seen as a spectrum, where at one end of the spectrum is the neutral observer and at the other, the full action researcher (Walsham 2006, p. 321). In this thesis, the observation activities were at first more inclined towards the neutral observer and consisted mostly of collecting basic information. A neutral observer is not necessarily the same as unbiased, as people are all biased by their background, knowledge, assumptions and prejudices. Neutral observer in this context means the researcher is not aligned with a particular group in the organization, concerned with making money or having strong prior views of specific systems, groups or processes of the organization (Walsham 2006, p. 322).

Towards the end of this study, the observation activities were clearly more in the involved end of the spectrum. Involvement is good for accessing people, issues, and data more thoroughly, as well as providing insights into interpersonal motives (Yin 2009, p. 102). An involved researcher is seen as trying to make a valid contribution to the organization, rather than taking the data away and writing it up solely for the literature (Walsham 2006, p. 321). Involved observation enables more participation, rather than merely accessing opinions as in an interview-only study. Involvement in this study manifested itself in the form of informal discussions, continuous feedback loops and iteratively building the model based on the comments from meetings, workshops and informal talks.

4.3. Document analysis

The last data collection method used here was document analysis, which was used to supplement the primary data gathered from the semi-structured interviews and participant observations.

Document analysis includes studying quotations, reports, memos and other published organization specific material (Patton 2005, p. 1364). Document analysis is used to better understand the current processes and ways of working in the organization, as well as to analyze the context for fitting the new model. The data used in the document analysis is gathered from explicit documentation from the company's intranet.

Analyzing the published documents can also be used to quickly familiarize the person conducting the study with the target organization (Rothwell et al. 2009, p. 246). The analyzed documents range from strategic plans of the IT group to individual meeting memos, emails, project plans and reports. Data about the organization and the current BCM practices were used merely as background information to gather requirements and needs for building the new BCM model. This data is not presented in detail due to its confidential nature and strategic importance to the target organization.

4.4. Analysis of the collected data

In order to draw valid conclusions and to present findings, the collected data needs to be analyzed (Yin 2009, p. 127). There are two basic approaches for analyzing the research data, inductive theory building and deduction (Olkkonen 1994, p. 26). A large ideological difference exists whether a study exploits the previously developed theories and research as a ground for the study, or aims to create new theories based on the data gathered during the study. Inductive theory building starts from gathering data and then inducing a more generic theory based on the data. Deductive strategy starts from a theory or theories that are seen to represent the truth, and deduces practical applications to more specific problems. (Olkkonen 1994, p. 27.)

The interpretation and analyzing process in qualitative research like this is not separated from the data collection. It is an ongoing iterative process that consists of a series of cycles including both deductive and inductive features. Thus, the main contribution of this thesis, the BCM model, will be built based on both empirical and theoretical findings. The underlying approach to analysis is however clearly more deductive, as the aim is to utilize known change management theories, frameworks and models as the basis for deducing an organization specific BCM model.

5. EMPIRICAL FINDINGS

This chapter will look at the main findings from interviews, document analysis and participant observation. The findings are categorized into themes, and each theme is presented in its own subchapter.

5.1. IT project management practices

Based on the answers given in the interviews, the nature of project work differs considerably between different units and teams. Understandably, projects with external customers have mixed management practices, as the wishes of external customers and partners have to be taken into account. Still, it is possible to find differences within purely internal projects as well. For example, some units execute their work following the traditional waterfall PM model, while in other units the methods of working resemble more continuous development or line work. One of the interviewees elaborates on this mixed methodology as follows.

The waterfall project management model is widely used, but agile methods are becoming more popular, since a considerable amount of work is done in the continuous development mode (i1).

The company has a written and clear definition of what should be called a project, and how it should be managed. They have a well-developed project management methodology, which sets clear guidelines on how certain things should be done. However, not all projects are managed alike, as not all units follow these guidelines to the same extent. In some units the methodology is seen more as a recommendation. For example, in the private customer unit, each project team has more or less their own ways of working and few teams strictly follow the PM models of the company. According to an interviewee from the private customer unit, this has never posed any problems and will probably not change in the near future. Other interviewees were of the opinion that the company should be more strict about what methods to use and how to use them, as the next comment illustrates.

Despite some improvement in the past years, the culture here is still giving too much freedom and we lack clear and common ways of working. (i15).

This might be related to the fact that the capabilities and skills of project managers vary greatly. The more experienced senior project managers do not necessarily need a strict methodology, whereas the less experienced junior project managers can benefit a lot from common practices and guidelines. It is therefore understandable that opinions vary greatly

on how strictly the ways of working should be defined. In addition, project managers often do not see the full benefits of the common methodology, which are visible via reporting and control structures. Hence, their motivation to use the methods might be reduced.

The main problem, which arises from not following the methodology, is that the project success may be too dependent on the capabilities of the project manager and the steering group. The methodology defines formal gates and phases, which cannot be bypassed unless a certain criterion is fulfilled. The purpose of fulfilling this criterion is to ensure good project quality regardless of the skills and experience of the project team or the steering group. Some steering groups do not expect that the project management methodology is utilized, which makes the problem worse.

If a common methodology is nonexistent or not followed, the project planning phase is easily neglected. To some people, the project planning phase seems to appear as wasted time, as it does not produce immediate results. But in fact, planning well in the beginning has a tremendously positive impact on the implementation phase. Neglecting the planning phase is not idiosyncratic only to the target company, it appears to be a common problem in many companies. A senior manager commented this issue saying:

The company culture does not support proper planning. Some project plans are done purely to be accepted by the steering group and because the methodology says they have to be done. The planning should serve the project and the project team better. (i5)

When discussing with the senior employees, their common observation was that in an attempt to minimize all risks and possibilities for failure, larger projects tend to be over-planned and managed extremely carefully. Smaller projects on the contrary, are managed more carelessly, some tasks are done left-handed and as a consequence too many of these projects are late or exceeding their budget. The target company organizes their project work in a matrix form, i.e. their projects are dependent of each other and the same people can work in multiple projects at the same time. This clearly poses certain risks as the below comment illustrates.

If some smaller projects are late and run over budget they will have an impact on other bigger projects as well. This in turn causes a snowball effect in the organization and can become very costly. (i8.)

The above comment emphasizes that there indeed is a need to develop the BCM model to suit smaller projects, as well as to train all project managers on applying the model.

5.2. Evaluation of the old BCM practices and templates

As mentioned in Chapter 1, the target organization already had several, yet outdated templates or tools for managing change. Before trying to improve the templates, an analysis was conducted to find out what are the biggest shortcomings of the current templates. The interviewees were asked, whether they knew these templates existed, if they had used them and their opinion about them. This section summarizes the answers to these questions.

The interviewees' experiences and opinions varied significantly, as their background and responsibilities were diverse. Employees working with change management had a lot of experience and many opinions about the existing templates. Very few project managers had used or even heard about the templates. In addition, many project managers were quite unfamiliar with the topic in general. Business change management was still understood rather well in the target organization. Not everyone knew the exact content of the term, but at least they could give a somewhat accurate definition for it. The majority of project managers also considered BCM to be an interesting topic and they were interested in learning more about it. All the comments about BCM were positive, and some of them are presented below.

If BCM is not functioning well, you cannot say that the project management is functioning well (i1).

A project can be completed without BCM, but BCM adds quality and improves the success rate of projects (i4).

BCM eases the project flow by reducing friction, i.e. it serves as a catalyst (i6).

Also the role and importance of a dedicated business change manager in projects has clearly been recognized. The company has had some extremely successful projects where they practiced BCM, however many project managers are still very unfamiliar with BCM activities. It appears that the benefits of BCM are often hard to justify to project managers who have no experience with projects where BCM has been used systematically. On the other hand, a clear majority of those who have been involved in projects, where there was a dedicated BCM resource, are now clearly advocates of BCM.

The majority of the project managers were of the opinion that the templates do not look user friendly, and it is not clear why or how to use them. Also it was often mentioned in the interviews that there are too many templates and they are a bit too difficult to understand without a proper training. Even employees who were very familiar with the BCM practices and had used them for some years, could find improvement points in the existing templates, as the below comment illustrates.

The templates are rather complex and not very user friendly, yet they are useful when used correctly (i12).

All the business change managers of the company agreed that the templates are good for big projects, but they have not been scaled down to serve smaller projects. The old templates are largely based on a large SAP implementation project, and need to be modified to address the needs of smaller projects as well.

The connection between the BCM practices and project management methodology was unclear to several interviewees. The old templates perhaps view business change management too much as a separate discipline. The next comment from a senior project manager, after first time seeing the templates (the old versions), illustrates this separation from the project management practices.

Many of the BCM activities seem applicable to my projects, but I have to find out a bit more to know when and where to apply them (i7).

It is therefore seen important that the BCM model being developed, would indicate a link between the BCM activities and project management practices. This was done by connecting the gates and phases of the BCM model and both waterfall and agile project management models.

To conclude, the project management methods and their application vary according to the organizational unit and project team. The BCM model should be integrated to the project management practices. However, it should not be forced upon the project managers. The best way to loosely integrate the models was seen to use the project gate decision, and connect the phases of the PM model to the phases of the BCM model.

The target organization already had very advanced BCM practices and a great deal of knowledge on change management. However, the qualitative data gathered from the interviews appear to suggest that BCM is not very well known everywhere in the organization. Yet, there is interest and appreciation for it. Project managers would like to know more about the topic, but the current problem is that the templates and other materials about BCM are scattered around, and are not in a coherent, well-understandable and presentable form. These are some of the issues that the developed BCM model has to be able to address.

5.3. Obstacles for BCM

Before this thesis was initiated, the company had recognized that the BCM practices are not widely used. They also understood that there is a need to improve the tools and practices, if they want to promote them for the whole organization. The IT department had their own ideas about why project managers were so reluctant to use the BCM

practices, of which some were presented in the previous section. In addition to evaluating the templates, the interviewees were also asked their opinion on why the BCM practices are not very widely spread. Next, some of their insights are presented.

The majority of answers identified a continuous rush and low priority as the main reason. When there is a strict time limit to complete a project, it is easy to skip activities, which are considered non-essential, hence they are not prioritized enough. The interviewed project managers gave a lot of comments similar to the one below.

There is no time for any extra activities, since very often there is already a new project waiting, when the current one is still ongoing (i6).

The project manager is responsible for the project as a whole, consequently the responsibility of adopting the BCM practices falls greatly on his shoulders. Some interviews revealed that project managers might think that BCM increases the workload of the project team. However, BCM activities should always be included in good project management practices. This is what some project managers, especially the more inexperienced ones, do not seem to understand. Therefore, the benefits of BCM should be communicated more clearly, and the developed model should indicate concretely how it eases the work of the project team as opposed to being an extra responsibility.

Several interviewees agreed that project managers do not know that the templates exist and they should simply be promoted more. According to an interviewee, business change management is not known well enough, because:

Not all project managers are certified project managers, and perhaps they have not received a proper project management training, which generally includes BCM (i7).

It was also mentioned by several interviewees that it might be an attitude problem, as the company is very technology focused. In fact, the majority of IT projects managers have a technical background, and they might naturally prefer a more technical style of managing projects. Engineers and other technical employees may not be very comfortable with the softer side of management. Therefore some projects might be overly managed as technical IT projects and the change impact is forgotten.

Another common misconception was that technical change management is enough to ensure the success of a change project. It was also discovered that sometimes project managers assume that all users are experts in the programs, systems and platforms they use, hence users do not need any training. The below comment illustrates this gap between IT project managers and users.

They [project managers] are so deep in the project that they do not know how to put themselves in the shoes of the user (i9).

The interviews revealed that the dialogue with top management is not always perfect, and there are several things to improve. Although the project manager has the main responsibility for the success of a project, the role of the sponsors, the project steering group and top management should not be forgotten. It was mentioned that the steering groups are in some cases ignorant of the BCM practices. The interviewees stated that the project steering group should request the project team to use the BCM practice more. In contrast, the project steering group should also give time and other resources for the project team to execute BCM properly. The sponsors should be supportive throughout the project. Therefore, it is important that top management and project steering groups also realize the benefits of the BCM practices and demand that they are being used in projects.

The biggest obstacle for BCM appeared to be related to the project managers themselves. They do not have enough knowledge on BCM, do not know how to apply the practices or have not realized the importance of BCM. The business change managers were of the opinion that too many project managers have no idea how to apply the BCM practices, for instance, manage or involve stakeholders.

Some of the interviewed project managers admitted that stakeholder management and change resistance is indeed a big issue in their projects. All in all, the interviewed employees had mixed feelings about change resistance, whether there is any and whether it is a problem. An interviewee commented on the issue ironically saying:

If it is never asked what people actually think about the change, of course the project team might feel there is no change resistance (i8).

One of the main reasons to introduce BCM practices is to be able to manage change resistance better. Therefore, this might be an issue that should be highlighted in the developed BCM model, as some employees seem to be in denial of its existence.

5.4. Expectations and needs

A significant portion of developing the new BCM model was to gather the expectations and to evaluate the needs of project managers regarding the model. Several technical restrictions about the model's format were made clear in the starting of the thesis. These restrictions were presented already in Chapter 1. It was clear from the start that "*what do you expect from the developed BCM model?*" cannot be asked directly. The expectations and needs had to be collected indirectly. This happened through asking the interviewees about their job, roles, responsibilities, successful and unsuccessful projects, working methods and their opinion on various BCM related topics.

In the majority of the interviews, the benefitting aspect came up. Project managers want to feel that the BCM model and its activities are somehow helping them in their work, not

slowing down their work. This benefit aspect was strongly emphasized, although no one could come up with any concrete examples on how the benefits should be demonstrated.

To get people to use the model, I think learning by repetition is the way to go. It is important to demonstrate the benefits and keep repeating them. (i4.)

A large part of the criticism towards the old templates could be translated to expectations for the new model. For instance, employees want the new model to be updated, user friendly, simple and easy to understand. In other words, it should be possible to use the model without extensive training, and the project managers should want to use it.

Many project managers seemed to prefer a well-defined BCM model with clear instructions. On the other hand, some project managers seemed to want more loosely defined steps and more freedom in the application of the model, as the below comment illustrates.

Project managers should still be provided some flexibility to adapt the practices, which they feel are most relevant and useful (i6).

It was first seen as a problem that there was no consensus among the interviewed people about how strictly and accurately the steps of the model should be defined. In the end, this was resolved by making a master version of the model, which included a detailed list of all the BCM activities and tools needed during a project. The master version is suitable for big projects and requires a bit more knowledge on BCM. It will be utilized mostly likely by the business change managers of the company. Based on the master version, a more basic version of the model was constructed to match the needs of the vast majority of project managers, whose projects introduce a rather modest change. The basic version was made relatively intuitive and easy to understand and utilize without any training.

Employees who had more experience with BCM could express more clearly what they wanted from the new model. One of the requests was to develop the model into a more integrated and coherent package as the next comment illustrates. It was also requested to construct the model so that project managers from all units could utilize it. This meant that the project management practices from all the units had to be taken into account.

The templates are great, but we need to productize the model and develop it into a more process-like form (i10).

The model has to be usable in all sorts of projects in all units of the company, not just the big strategic ones in the IT department (i11).

These issues were resolved by integrating the developed BCM model into the phases and gate decisions of the widely used project management methodology. The end result was

a process-like model that can be used in large as well as small projects, managed either according to the traditional waterfall model or according to the agile project management principles. The next chapter will introduce the development and the contents of the BCM model in more detail.

6. THE DEVELOPED BCM MODEL

This chapter presents the actual contributions of this thesis in the form of the developed BCM model. First the development process of the model is described, then the content of the model's phases is presented in rough detail.

6.1. Developing the BCM model

The BCM model was developed by integrating the theoretical and empirical findings of this study. Developing the model included three main stages.

In the first stage, the main phases of the BCM model were constructed by conducting a thorough literature review into the relevant literature on BCM and IT project management. The results are incorporated in chapters 2 and 3. In the developed BCM model, the planned and emergent approaches to change are integrated, as companies that effectively combine the planned and emergent approaches can expect big payoffs in profitability and productivity and are more likely to achieve a sustainable competitive advantage. With this integrated approach, the model addresses the strategic, procedural and human perspectives of organizational change. The integrated approach also supports a clear and structured actions and steps, as well as allows the project manager to be flexible in applying these actions and following the steps. At the end of the first stage, the developed BCM model consisted of the following four model phases; understand & prepare, plan, change & execute and finalize. The BCM model's phases depict the typical change process, which starts with understanding the change and preparing for its impacts. Continues with carefully planning the change implementation. After which, the change needs to be executed according to the plan. And finally, the change project has to be finalized by anchoring the changes to the organization, its culture and ways of working.

In the second stage, the project management methodology of the target organization (introduced in Chapter 3) was studied, and the developed phases were adjusted to suit the methodology. The organization's project management methodology consists of four project phases; initiate, plan implement and finalize, each starting and ending with a formal project gate decision (G0...G4). The BCM model phases were integrated into the project management methodology of the target organization and are shown in Figure 6.1. The initial content of each phase was also formulated at this stage. The content of each phase is described in rough detail in the next sections.

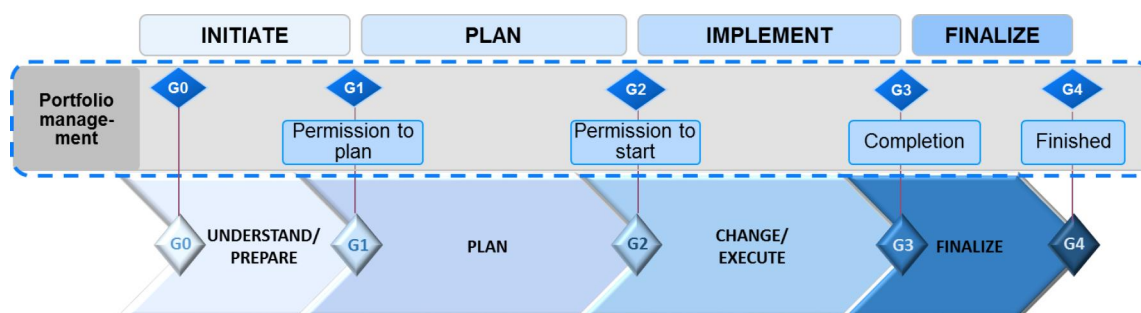


Figure 6.1. Phases of the developed BCM model integrated into the PM models

In the third stage, after creating the high-level phases of the BCM model and integrating them within the project management phases, the detailed activities and supporting tools were introduced. Each model phase consists of a set of activities that should be performed during that phase. For the majority of activities, a supporting tool was developed to help the project manager and the project team in executing the activity. This last stage of developing the activities and tools was executed iteratively, constantly updating the model and requesting feedback on the latest modifications from the interviewees.

The process of creating the activities began with analyzing BCM models and especially the more detailed change management activities presented in academic literature. This resulted in a process including 22 activities, consisting mainly of the well-known key activities of BCM, e.g., stakeholder identification, stakeholder analysis, stakeholder management, change impact analysis, communication planning, training and change monitoring. This initial BCM model was then iteratively developed into its final version via a series of workshops and discussions with the interviewees. As mentioned previously, the company already had several existing BCM tools. Therefore, part of the tools only needed to be updated rather than created from scratch.

The final version of the BCM model consists of 41 activities and 23 supporting tools. Each activity has a target to specify the goal and purpose of that activity. Each activity, however, does not have its own tool, because some of the activities are iterative, e.g., do an initial change impact analysis, and update the change impact analysis. These two activities only have one tool, the change impact analysis. In addition, few activities were written in the form of a recommendation, for instance, celebrate success. It was seen that these types of activities do not require a supporting tool.

The actual activities and tools are not disclosed due to confidentiality, but Figure 6.2 will give the reader an idea about how the activities, targets and tools relate to each other and to the phases of the BCM model. Figure 6.2 is a snapshot of a part of the BCM model's planning phase, where one of the activities, its target and supporting tool are revealed. For a full view of the BCM model, the reader is referred to Appendix 3.

| | | | |
|---|----------|--|------------------------------------|
| Activity | P | Target | Tool |
| Activity | L | Target | Tool |
| Specify the communication activities | A | Responsibles found and first events scheduled | Detailed Communication Plan |
| Activity | N | Target | Tool |
| Activity | | Target | Tool |
| Activity | | Target | Tool |

Figure 6.2. Snapshot of the developed BCM model

As mentioned in chapter 5, different units have different needs and practices, which poses conflicting requirements to the developed BCM model. Addressing all the needs and requirements at once was seen rather difficult. However, consensus was achieved by developing the model iteratively, constantly asking for feedback about the content of the model, as well as developing two versions of the BCM model. A master version for big strategic projects and another, more basic version, for smaller projects. A snapshot (without the detailed activities, targets or tools) of the master version is presented in Appendix 3.

6.2. Phases of the BCM model

In the next sections, the BCM model's four phases; understand & prepare, plan, change & execute and finalize, and their contents is presented in rough detail. The names of the phases were selected to depict the actual content of the phase and the change process itself, which generally starts with understanding the impacts of change and preparing the organization for the changes.

6.2.1. Understand and prepare

In this initial phase, the project team needs to understand the scope, nature and intensity of the upcoming change, as well as to prepare for the impacts. This phase is all about formalizing concepts. Everything discussed in this phase is then expanded upon during the planning phase. Generally, in the initial phase, the goals and objectives of the project are defined, project benefits are evaluated and determined, the project charter is written and the project manager is appointed.

The BCM activities at this stage are rather minimal and they focus on building understanding and shared direction among the project team members, and commitment among the stakeholders. The BCM activities include the initial change analysis, stakeholder identification and analysis, and constructing preliminary communication material about the project.

6.2.2. Plan

Planning is one of the most essential and time consuming activities of a project. This phase also constitutes a majority of the BCM work, as the foundation for success is laid here. The planning phase outlines what is involved in completing the work of the project, where the project is aiming at and how to get there.

Some of the project management activities during planning are: determining project deliverables and milestones, writing and publishing a scope statement, determining requirements, breaking down the work of the project into tasks and creating a Work Breakdown Structure (WBS), developing a project schedule, determining resource needs, establishing a project budget and developing risk and quality management plans

Typical BCM activities in this phase include constructing the BCM plan, which should be dynamic, i.e. it should allow to make adjustments along the way, as everything is not known at the beginning. Other activities are analyzing the training needs and preparing the training strategy, making the communication plan and updating the initial change analysis and stakeholder analysis.

Change analysis is a key activity in BCM, because the majority of the other activities utilizes the information that the change analysis provides. Based on the change analysis, it should be fairly easy to recognize the most important stakeholders of the project. Thus, the change analysis needs to be done properly and kept updated throughout the project.

6.2.3. Change and execute

While the planning phase is the heart of determining project success, the execution phase is where the real work happens. Great plans require follow-through and during the execution phase the developed project plans are put into action. Project team members complete their tasks and project progress is communicated to stakeholders and management. Some of the results produced include: obtaining project resources, establishing the project team, directing and leading the project team, conducting project status meetings, publishing project status reports and other project information, communicating project information extensively, managing and directing contractors, managing project progress and implementing quality assurance procedures.

During the change and execution phase, the focus shifts to information-building, testing, questioning and experimentation. People should be abandoning old and inappropriate behavior, structures and procedures. At this stage, the project team should create short-term wins and consolidate the credibility from those wins to encourage more change.

The BCM activities in this phase focus mostly on ensuring a smooth execution by organizing trainings, following up the implementation of roles and responsibilities, monitoring the change and communicating extensively.

6.2.4. Finalize

At the final phase BCM activities focus on measuring and monitoring the change impact and business benefits, responding quickly and taking corrective actions if needed, e.g. organizing additional training. Some of the results produced during the finalizing phase include: obtaining acceptance of project deliverables, documenting the lessons learned, formalizing the closure of the project and releasing project resources.

One of the most important aspects of this phase is documenting the lessons learned. The lessons-learned activity is aimed at analyzing the practices, decisions and processes that worked well in the project and similarly analyze what could have been improved. Writing them down and sharing them helps to capitalize on the knowledge that was produced during the project. A separate lessons-learned can be conducted about how well the BCM activities went, or it can be combined with the general lessons-learned from the whole project.

Another aspect of this phase is celebrating. If the project team has met or exceeded the agreed-upon project goals and the stakeholders are satisfied, it should be celebrated. Projects are team efforts, and it is always appropriate to congratulate the team for a great job and recognize everyone's contribution.

7. DISCUSSION

In this chapter the phases of the developed model will be discussed in relation to the existing theory on change management and IT project management. A BCM model is a way of representing and describing a theoretical understanding of the change process via a series of steps or phases (Turner et al. 2009, p. 26). The idea of using a model is old, as models have been used for centuries to present ideas, processes and lessons learned. They enable clarifying and simplifying complex theories and processes, and therefore a model was seen as the most suitable format to consolidate the findings of this study.

The empirical part of the study resulted in a few other observations about business change management, which are not incorporated in the model. These observations will be presented in the form of recommendations for the target organization. The last part of this chapter will evaluate whether the research question was answered adequately.

7.1. Discussing the developed BCM model

The developed BCM model puts more emphasize on the initiation and planning phases, communication activities, stakeholder management activities, reducing the resistance to change, sharing the lessons learned with colleagues and aligning the BCM practices with the IT project management practices. These are all aspects that were seen important either by the interviewees, the academic literature or both.

In the developed BCM model, the BCM activities start during the initiation phase of a project. Too often they are introduced only in the execution phase, when the project has already run into problems, e.g., the project manager has confronted poor sponsorship, high levels of resistance and cultural conflict. Then, in an attempt to recover the project's integrity, there is a last-minute rush to attach a few change management solutions. Then it is too late, because BCM cannot be applied as a magic fix in the end of a project to prevent it from failing.

In the initiation phase, it is important that the project manager makes a case for change. Often people think that the need for this change is so obvious that everyone is automatically in favor of it. But in reality, whether the change is large or small, it needs to be communicated to others. Employees need to know why this change is important, how urgent it is and what needs to be changed. Furthermore, they need to understand what are the initial and long-term impacts of the change, what is the type and scope of the change and what are the expected outcomes of the change (Payne 2005, p. 56). Therefore it is good to create and share initial communication materials already in the initiation phase of a project. The communication activities in the initiation phase should focus on

creating a sense of urgency and need for change. The project manager should emphasize information that increases the key stakeholders' dissatisfaction with the status quo and convincingly presents the price of the status quo as being higher than the price of change (Harrington et al. 2000, p. 101).

Change projects always begin with identifying and analyzing the change from different angles or perspectives (Arain & Low 2009, p. 142). There are numerous ways to conduct the change analysis. One of the most popular tools is Leavitt's diamond model introduced in Figure 2.3. It is used to analyze the impacts of the change from four angles; people, technology, structure and tasks to form a thorough understanding about the change. The diamond model was chosen as the basis of the change impact analysis tool of the developed BCM model, as it is easy to understand and use, it allows a thorough change analysis and enables to see and understand the interconnections between the different perspectives.

The developed model focuses greatly on the planning phase, which can consume a large amount of the overall project time, but it is generally worth the investment. Planning was also recognized as one of the weaknesses and easily neglectable phases by many of the interviewees. Therefore, to make project managers realize the importance of planning, the planning phase of the BCM model is the most exhaustive, and it contains most of the activities and tools. There are lots of statistics in the literature showing that it is more cost-effective to spend time on planning than on executing a project, as spending time on an effective planning in fact saves money and time in the long run (Baca 2005, p. 24). The work done in the planning phase will determine how the project will progress through the remaining phases. If communication with the stakeholders is good through this phase, it assures that all project team members and stakeholders understand the purpose of the project and how the work will be carried out. (Baca 2005 p. 113.)

One of the key tools in the planning phase is the BCM plan. The ideal business change management plan combines aspects of both strategic and tactical planning (Payne 2005, p. 105). Based on the interviews, this tool was one of the most difficult to understand and keep up-to-date, because there are so many BCM activities to keep track of, and the project schedules tend to change often. However, the BCM plan is rather useful in establishing a common understanding among the project team and creating a holistic approach that links individual efforts to the change objectives. Therefore, it was decided to keep the BCM plan as one of the tools of the developed BCM model. To align the BCM activities and project management activities, this thesis followed Baca's (2005, p. 25) suggestion to integrate the BCM plan to the project plan. The interviews confirmed that, when the BCM activities are included in the project plan, it will also help to communicate the activities to the whole project team.

Another important tool in the planning phase is the communication plan. As communication is one of the aspects that needs improving and the new BCM model emphasizes it strongly, a fair amount of effort should be put into planning the communications. The communication plan should contain the identified audience, frequency of communication, channels used, timing of communication and the content (Clarke & Carside 1997, p. 541). Some projects may require a separate plan for internal and external communication. Although multiple communication channels are generally favored, it is important to keep the message coherent in all channels to avoid confusion. The message itself in the planning phase should focus on the true need and the logic behind the change, as that will help reducing the possible resistance to change.

An important aspect in reducing the resistance to change is to take into account the changing roles and responsibilities. If the roles and responsibilities of people are changing, the new roles and responsibilities need to be clarified and followed through in the change process (Rothwell et al. 2009, p. 237). In the planning phase, it is important to ensure that people impacted by the change understand it and have the needed knowledge, skills and capabilities to cope with it. Based on the interviews, this was best achieved by involving employees in workshops and planning groups, asking feedback and building commitment. All these activities were included in the developed BCM model, as they greatly help to spread information and understanding about the change project and consequently help to reduce the resistance to change.

If the planning phase has been conducted properly, the execution phase should proceed rather smoothly. However, this phase is where the majority of projects run into serious implementation problems, especially if proper planning has been neglected. The change and execute phase is where the project will likely spend most of the budget and run into scheduling conflicts (Baca 2005, p. 114). This is another major reason, why the developed model puts so much emphasis on importance of planning.

Problems found early in the project are faster to resolve and cheaper to fix. Yet, problems are generally hard to find in the starting phase, as the ideas for the project are just being formulated. For most problems found in the planning phase, the solutions should still be fairly easy to integrate into the project plan. If problems appear during the execution phase, they should be thoroughly analyzed before incorporating them into the plan (Baca 2005, p. 115). Problems that are found during the execution can be disastrous for the completion. All the interviewees were on the same opinion that it is the project manager's responsibility to update the project planning documents and redirect and refocus the project team on the correct tasks.

The finalizing is the phase that project managers tend to skip. Once the project is complete, it is easy to start focusing on the next project. One of the most important aspects of this phase is documenting the lessons learned (Baca 2005, p. 115). A few employees

criticized the current level of sharing their knowledge during and especially after projects, and pointed out that this is something that definitely needs improving. However, as the interviews revealed, after successfully completing a project, it is hard to motivate people to gather and share the lessons learned and close the project properly.

Another important activity of the finalizing phase is celebrating. If the goal has been met and the project has been successful, it should be celebrated. Victory can also be celebrated after every major milestone. This will help to lift the team spirit and motivate the project team, as projects are always team efforts (Baca 2005, p. 116). Celebrating was already practiced in the target organization, and people seemed to understand its importance well.

According to Kotter (1996) many change projects fail because victory is declared too early. Therefore, the finalizing phase should not be skipped. Even after the project deliverables are implemented, communication and change monitoring should continue to make sure that the change is truly anchored in the behavior, values and culture of the organization.

7.2. Recommendations for the target organization

During the empirical part of this study, a gap was identified between the BCM activities and project management practices. There are numerous reasons for this gap, many of which have been presented earlier. The biggest reason however seems to be a lack of knowledge and adequate interunit communication. Integrating the BCM model into the project management methodology was suggested to help bridging this gap. Another possible way of narrowing the gap more would be to introduce and include the BCM model and some BCM activities already in the project management and project methodology trainings. Doing this would naturally increase the work of the trainers, but it would also increase the project managers' knowledge about BCM and help them to understand how BCM and project management are related to each other.

One of the issues that was identified, relates to the project steering groups and project owners. They often lack knowledge and understanding on the benefits of BCM as well, which reflects to the amount of resources that is dedicated to BCM in a project. Therefore, in addition to training project managers on BCM, informing the steering group members and project owners about the benefits and practices of BCM is seen extremely valuable. Doing this would help allocating resources to BCM and prioritizing BCM activities more in an IT change project. If there is a lack of support from these major project stakeholders, it is very likely that the BCM model will not be utilized during the project due to a lack of resources and interest in BCM.

During the participant observation, it was noted that there is a mixed and misleading terminology used about change management. This was later confirmed in the interviews.

As projects in different units practice all kinds of change management, e.g., business change management, technical change management, control change management and managing changes in requirements. These terms naturally refer to totally different activities. Therefore, it is not always clear to employees, what is meant by change management in different contexts. This mixed terminology may lead to confusion and misunderstandings between the terms. This thesis suggests that the target organization should clarify the terms, for instance, by explaining their differences in an intranet page, and being strict about not forgetting the business word when talking about business change management in particular.

The interviews ironically revealed a lack of communication between the internal communications unit and the IT unit, where the business change managers are employed. It was unclear to the people responsible for internal communications, what is meant by BCM. In addition, despite communication being a major component in BCM, they did not seem to understand exactly how communication is connected to change management. This misunderstanding resulted in doing the same work twice, as the people who worked with communications started to develop their own communication templates for projects, which were already being developed within the internal IT unit. Therefore, closer collaboration and more communication between the internal communication and internal IT unit is strongly suggested. In addition, having a BCM training just for the people who work with communications is recommended.

The BCM model developed in this thesis will only be successful in the target organization, if it is promoted and anchored into the ways of working, similar to any change implementation itself. Therefore, it is suggested that after the BCM model is officially launched in the organization, the business change managers in the company should actively keep promoting the new model to clearly make it part of the new ways of working. To keep the model fresh, they should also update it in the future to match any emerging needs.

7.3. Answering the research question

The first sub-question (*what kind of previously developed BCM models exist*) was answered in chapter 2 where the two main approaches to manage change, the planned and the emergent approach, were introduced. There are two main types of BCM models; the step models, which follow the planned approach to change, and the emergent models, which follow the emergent approach. Two step models by Lewin and Kotter, and one emergent model by Kanter et al. were described in more detail to give the reader a better insight about their differences. The planned approach and step models view change as intentional and anticipatory. Planning is prioritized and it is believed that change can be directed from the top. In the emergent approach and models, on the other hand, change is viewed as something that cannot be controlled or anticipated. Change is treated as a

continuous and open-ended process and managing change focuses on building organizational capabilities rather than planning and controlling the change. However, the distinction between emergent and planned change is not straightforward, as they both contain many of the same elements, and there is no clear consensus even in the academic literature about their differences.

The second sub-question (*what are the needs of the project managers regarding the BCM model being developed*) was answered in the empirical part of the study, in chapter 5. Some needs could be generalized, e.g., the project managers wanted the model to be intuitive, rather simple and easily applicable. Different units in the company, however, had some different needs, which posed conflicting requirements on the BCM model. It was rather challenging to address all the different needs, as it is difficult to develop a model that is at the same time strict and flexible, simplified and comprehensive, and suitable for big as well as small projects. The issue was resolved by developing two versions of the model: a master version for big strategic projects that contains all the actions and tools, and a more basic version for smaller projects, which contains only the essential steps and tools. To further address the needs of different units, the models were developed in workshops with the interviewees, constantly discussing and requesting feedback about the models from the interviewees. It was not the initial plan to develop the model in such an iterative way. During the thesis, the iterative development was, however, seen best to reach a consensus. As the researcher did not have previous employment in the company, the iterative development also helped to ensure that the BCM model is well-suited for the target organization and applicable in practice.

The last sub-question (*how to integrate the BCM model to the project management methods and practices*) was answered by utilizing all three qualitative data collection methods to study the project management methodology of the target organization (presented in chapter 3). This sub-question implies that it is beneficial in the first place to integrate the model to the project management practices. This was indeed assumed in the beginning, however it was validated and confirmed during the empirical part that it is useful and wanted by the target organization. The data gathered during the study appears to suggest that the best way to integrate the BCM model to the project management methods and practices is to connect the project gate decisions and the phases of the models, so that it is clear which activities and tasks are performed at a certain phase, and in which order they should be performed.

Studying the previously developed change management models helped to understand the nature of changes and different approaches to manage them. It also helped to better choose the type of model and which elements to include in the developed BCM model. The needs and expectations of project manager regarding BCM and the model are naturally essential to study, as they function as the basis for the BCM model. And finally, integrating the BCM model to the project management model allowed to adjust the BCM model to the

specific needs of the target organization, and to make it easily understandable and intuitive for the project managers to use. All the sub-questions contributed to answer the main research question (*what kind of a business change management model suits the target organization's IT project management methods and project culture*). The main research question is answered, by merging the theoretical and empirical findings in the developed BCM model. The planned and emergent approaches to change are integrated in the developed BCM model, as companies combining the approaches are more likely to achieve a sustainable competitive advantage. With the integrated approach, the model addresses the strategic, procedural and human aspects of change management.

At minimum, the developed model provides a list of activities to perform and topics to take into account in different project phases, when managing an IT change project. Used at its full potential, the model, together with its steps and tools, forms a holistic and integrated approach to systematically improve IT project quality and success capability. Even though the model is rather intuitive and easy to understand, being able to use it to its full potential probably requires some training on BCM and how to use the model. Although the BCM model was developed for IT project purposes, most of the tools can be applied to other change projects as well.

7.4. Critique

As the researcher did not have any previous employment in the target organization, it can be criticized whether her understanding about the culture, ways of working and project management practices, which was formed during the study, was adequate for developing the BCM model. Perhaps some previous experience would have helped to form a deeper understanding about the organization and to align the BCM model more with their project culture and practices. On the other hand, a fresh perspective was welcomed by the company. Therefore, being too familiar with the organization and its ways of working might have posed other kinds of limitations on the work.

One of the goals of the target organization is to increase awareness about business change management practices. As mentioned previously, the model developed in this thesis is meant to be one big step towards achieving that goal. However, the model itself does not contain any means of measuring if this goal is being achieved or not. If the target organization wants to accurately measure the awareness about BCM and the utilization of the BCM model, they should introduce a separate measuring tool.

Different opinions and models than the one presented in this thesis are possible, as there is not one correct solution. Such deviations would be the result of differences in personal views and biases associated with qualitative research. Nevertheless, the researcher has tried to avoid these biases by utilizing different data collection methods, and applying an objective approach to collecting and analyzing data.

The aim of this thesis was to develop a model that is suitable for the target organization's project management practices and project culture. To be fully certain of the BCM model's applicability, it should be tested and validated in practice. As this thesis only described the analysis and development part of the model, no real implementation or practical testing of the full model was done. Only part of the tools were tested and approved in real projects by the business change managers, but not the full model. This was due to scope and time constraints. Nevertheless, this thesis sparked another study that will continue this work and focus on the implementation part of the developed BCM model.

This thesis provides the organization specific, rather self-explanatory BCM model, and the tools for managing change in IT projects. However, project managers need to understand the limitations of general change models and apply them with common sense (Turner et al. 2009, p. 31). Very few models can replace common sense, every project manager using the model has to learn to select and apply the tools in different change contexts.

8. CONCLUSIONS

It is evident that in today's competitive business environment, change is the new norm. Adapting and responding to changes has become the new core competence to better serve the emerging customer needs and to survive in the dynamic market. Managing change, as well as developing organizational change capacity is essential for every organization, especially in the IT and telecommunication industry.

Business change management is a challenging task. Most organizations find themselves undertaking a number of programs and projects as part of their change efforts. Nowadays IT is so interlinked with the processes, structure and culture of an organization that IT projects are in fact the most common change initiatives a modern organization faces. Projects support a clear, timed and structured approach to implementing changes, thus they are the perfect vehicles of change. As a result of driving changes in project form, business change management has been discreetly added to the existing responsibilities of IT project managers. Therefore, every project manager should have basic change management skills.

Project management has been identified as one of the success factors in business change management and significant research has been conducted in both the business change management and project management literature, however there has been very little engagement between them. This thesis made an effort to combine the two by focusing on business change management within IT projects.

The objective of this thesis was to develop a business change management model that suits the target organization's IT project management methods and project culture. The purpose of the model is to help the project managers in managing the changes their IT projects create, and thus increase the satisfaction and success rate of IT projects in the company.

This study includes a literature review, where various business change management models were described, and change as a phenomena as well as IT project management were studied from various perspectives. To answer the research question, first the planned approach and the emergent approach to change were compared. As an outcome of this thesis, the theories of BCM and project management were integrated. This included studying the connection between IT project failures and BCM practices, as well as exploring ways to prevent project failures with BCM. The theoretical findings also form the basis of the developed BCM model, which was completed and adjusted based on the empirical findings.

To complete the model, an empirical part was conducted in the form of a qualitative case study, which utilized semi-structured interviews, participant observation and document analysis as data collection methods. This part focused on finding out the needs and expectations of the IT project managers regarding the developed BCM model. The empirical part also focused on exploring, how to integrate the BCM model into the project management practices of the target organization. The qualitative data gathered during the study suggested that the best way to combine the BCM model and the project management methods is to connect the project gate decisions (G0..G4) and the phases to make the model more intuitive and easily applicable. Doing this would clarify which activities and tasks are performed at a certain phase, and in which order they should be performed. Using the inputs from the empirical part, the model was completed together with a set of actions and tools.

By merging the theoretical and empirical findings a new process-like BCM model for IT projects was developed as the main contribution of this thesis. In developing the model, the project culture, ways of working and different (including waterfall and agile) project management methods used in the target organization were taken into account. Often conflicting needs and expectations of the IT project managers in different units had to be taken into account as well, and incorporated into the developed model. The development process was very iterative, as the model was feedbacked several times and optimized using the inputs from interviewees to make it suitable for the target organization's project management practices.

The developed BCM model contains various BCM templates, which should be used as tools for managing change. The templates focus on specific change management actions, enable discussion and help to align the plans within the project team. A lot of effort was put into making the templates fresh looking, user friendly and intuitive. All the templates and tools in the new BCM model were either updated or created from scratch. In addition, activities were created to make the model more easily understandable and comprehensive, and to guide the actions of the IT project managers.

Due to the timeframe and scope of this thesis, the BCM model was not tested in practice during this study. However, some tools were put into practical use already during the development and their usability and applicability was validated in actual IT change projects. The full model was reviewed by all employees who work with BCM, and approved also by the head of the IT common services group. The developed model got a very positive response from the whole IT department, who initiated the study. One of the initial objectives was to utilize the model in the whole organization, not just in the IT department. This objective was achieved, as the BCM model got widespread attention and it is already being implemented in the corporate customer unit as well. Therefore, it can be concluded that the thesis achieved its research objective by developing a BCM

model that is suitable for the target organization's IT project management practices and project culture.

While the influences for the developed BCM model have been drawn from the data collected within the target organization, the principles of the BCM model are broad enough in nature that with very little modifications the model should be applicable to almost any organization.

This thesis presented one solution to the problem, a one kind of a BCM model with certain steps and tools. Other types of models with different contents are naturally possible, as in a qualitative study the differences in researcher's background, personal views as well as biases associated with the research methods have an influence on the interpretations made. However, the researcher has tried to avoid these biases by utilizing complementary data collection methods, as well as applying an objective and critical approach to collecting and analyzing data.

BIBLIOGRAPHY

- Arain, F., M. & Low, S., P. 2009. Education in a Competitive and Globalizing World: IT--Based Project Change Management System. Nova Science Publishers, Incorporated. New York, NY, USA. 291 p.
- Baca, C., M. 2005. Project Manager's Spotlight on Change Management. John Wiley & Sons. Jossey-Bass. 145 p.
- Bamford, D., R., & Forrester, P., L. 2003. Managing planned and emergent change within an operations management environment. *International Journal of Operations & Production Management*. Vol. 23.No. 5. pp. 546-564.
- Bartoli, A, & Hermel, P. 2004. Managing change and innovation in IT implementation process. *Journal of Manufacturing Technology Management*. Vol. 15. No. 5. pp. 416-425.
- Beer, M, & Nohria, N. 2000. Cracking the Code of Change. *Harvard Business Review*, Vol. 78, No. 3, pp. 133-141.
- Benjamin, R. I., & Levinson, E. 1993. A framework for managing IT-enabled change. *Sloan Management Review*, Vol. 34. No. 4. pp. 23-33.
- Bullock, R. J., & Batten, D. 1985. It's just a phase we're going through: a review and synthesis of OD phase analysis. *Group & Organization Management*, Vol. 10, No. 4, pp. 383-412.
- Burchell, J. 2011. Anticipating and Managing Resistance in Organizational Information Technology (IT) Change Initiatives. *International Journal of the Academic Business World*. Vol. 5. No. 1. pp. 19-28.
- Burke, W., & Litwin, G. H. 1992. A Causal Model of Organizational Performance and Change. *Journal of Management*, Vol. 18. No. 3. pp. 523-545.
- Burnes, B. 1996. No such thing as... a "one best way" to manage organizational change. *Management Decision*. Vol. 34. No. 10. Pp. 11-18.
- Burnes, B. 2004a. Kurt Lewin and the Planned Approach to Change: A Re-appraisal. *Journal of Management studies*. Vol. 41. No. 6. pp. 977-1002.
- Burnes, B. 2004b. *Managing Change: A Strategic Approach to Organisational Dynamics*, 4th edition. Harlow, Pearson Education. 623 p.
- Butler, T. 1998. Towards a hermeneutic method for interpretive research in information systems. *Journal of Information Technology*, Vol. 13. pp. 285-300.
- By, T. R. 2005. Organisational change management: A critical review. *Journal of Change Management*. Vol. 5. No. 4. pp. 369-380.
- Charette, R. N. 2005. Why software fails. *Spectrum*, IEEE 42, No. 9. pp. 42-49.
- Chin, G. 2004. Agile project management. New York. AMACOM Div American Mgmt Assn 229 p.
- Clarke, A. & Garside, J. 1997. The development of a best practice model for change management. *European Management Journal*. Vol. 15. No. 5. pp. 537-545.
- Conner, D. R., & J. A. 1988. Newman Jr. Managing a successful organizational change. *Healthcare financial management: journal of the Healthcare Financial Management Association*. Vol. 42. No. 6. pp. 62-64.
- Curley, K. F., & Kivowitz, B. 2001. The manager's pocket guide to knowledge management. *Human Resource Development*. 126 p.
- Dale, B. G., Van Der Wiele, T., & Van Iwaarden, J. 2013. *Managing quality*. John Wiley & Sons. 640 p.

- Dinsmore, P. C., & Cabanis-Brewin, J. 2014. The AMA handbook of project management. 4th edition. AMACOM Div American Mgmt Assn. 518 p.
- Doyle, M. 2002. From change novice to change expert: Issues of learning, development and support. *Personnel Review*. Vol. 31. No. 4. pp. 465-481.
- Fossum, L. 1989. Understanding organizational change converting theory to practice. Crisp Learning. Menlo Park, CA. 86 p.
- Galoppin, L., & Caems, S. 2007. Managing Organizational Change during SAP Implementations. SAP Press. 365 p.
- Gareis, M. & Huemann, M. 2008. Change management and projects. *International Journal of Project Management*. Vol. 26 pp. 771–772.
- Gill, R. 2002. Change management--or change leadership?. *Journal of change management*. Vol. 3. No. 4. pp. 307-318.
- Gorman, G. E. & Clayton, P. 1997. *Qualitative Research for the Information Professional: A Practical Handbook*. London. Library Association Publishing. 287 p.
- Harrington, H. J., Conner, D., & Horney, N. L. 2000. Project change management: Applying change management to improvement projects. New York, NY: McGraw-Hill. 332 p.
- Harris, J. 2006. Managing change in IT improvement initiatives. *Government Finance Review*. Vol. 22. No. 1. pp. 36-40.
- Hass, K. B. 2007. The blending of traditional and agile project management. *PM world today*. Vol. 9. No. 5. pp. 1-8.
- Hiatt, J., & Creasey, T. J. 2003. *Change Management: the people side of change*. Colorado, USA. Prosci Research. 148 p.
- Hirsjärvi, S., Remes, P., & Sajavaara, P. 1997. *Tutki ja kirjoita*. Helsinki: Kirjayhtymä. 448 p.
- Hughes, M. 2007. The tools and techniques of change management. *Journal of change management*. Vol. 7. No. 1. pp. 37-49.
- Iles, V., & Sutherland, K. (2001). Organisational change. A review for health care managers, professionals and researchers. 100 p.
- Jurison, J. 1999. Software Project Management: The Manager's View. *Communications of the Association for Information Systems*: Vol. 2, Article 17. pp. 1 - 57.
- Kanter, R. M., Stein, B. A. & Jick, T. D. 1992. *The Challenge of Organizational Change*. New York: The Free Press. 535 p.
- Kappelman, L, A., McKeeman, R. & Zhang, L. 2006. Early warning signs of IT project failure: The dominant dozen. *Information systems management*. Vol. 23. No. 4. pp. 31-36.
- Klein, S., M. 1996. A management communication strategy for change. *Journal of Organizational Change Management*. Vol. 9, No. 2. pp. 32-46.
- Kotter, J. P. 1996. *Leading Change*. Boston, MA, Harvard Business School Press. 187 p.
- Kübler-Ross, E. 1969. *On Death and Dying*. Macmillan, New York. 260 p.
- Leavitt, H. J. 1965. Applied organizational change in industry: Structural, technological and humanistic approaches, in: J.G. March Ed., *Handbook of organizations*. Rand McNally, Chicago, pp. 1144–1170.
- Lehmann, V. 2010. Connecting changes to projects using a historical perspective: Towards some new canvases for researchers. *International Journal of Project Management*. Vol. 28. No. 4. pp. 328-338.
- Lewin, K. 1947. *Frontiers in group dynamics: Concept, Method and Reality in Social Science; Social Equilibria and Social Change*. *Human relations*. Vol. 1. No. 1. pp. 5-41.

- Lewin, K. 1951. *Field theory in social science: selected theoretical papers* (Edited by Dorwin Cartwright.). Oxford, England: Harpers. 346 p.
- Liu, L. C., & Horowitz, E. 1989. A formal model for software project management. *IEEE Transactions on Software Engineering*. Vol. 15. No. 10. pp. 1280-1293.
- Luecke, R. 2003. *Managing change and transition*. Vol. 3. Harvard Business Press, 138 p.
- Markus, M. L. 2004. Technochange management: using IT to drive organizational change. *Journal of Information Technology*. Vol. 19. No. 1 pp. 4-20.
- Martin, I., & Cheung, Y. 2002. Change management at Mobil Oil Australia. *Business Process Management Journal*. Vol. 8. No. 5. pp. 447-461.
- McKinsey Quarterly, 2010. *McKinsey Global Survey: What Successful Transformations Share*.
- Myers, M. D. 1997. Qualitative Research in Information Systems. *MIS Quarterly*, 21, 2. pp. 241-242. *MISQ Discovery*, archival version, June 1997, http://www.misq.org/discovery/MISQD_isworld/. *MISQ Discovery*, updated version, last modified: January 4, 2008 <http://www.qual.auckland.ac.nz/>
- Nadler, D. A. 1982. Managing transitions to uncertain future states. *Organizational Dynamics*. Vol. 11. No. 1. pp. 37-45.
- Nadler, D. A., & Tushman, M. L. 1989. Organizational frame bending: principles for managing reorientation. *The Academy of Management Executive*, Vol. 3. No. 3. pp. 194-204.
- Newton, R. 2007. *Managing Change Step by Step. All You Need to Build a Plan and Make it Happen*, Harlow, Pearson Education. 243 p.
- Nickols, F. 2010. *Change management 101: A primer*. [WWW] available at <http://www.nickols.us/change.pdf>, accessed 14.6.2014. pp. 1-11.
- Oakland, J. S. & Tanner, S. J. 2007. A new framework for managing change. *The TQM Magazine*. Vol. 19. No. 6. pp. 572-589.
- O'Connor, C. A. 1993. Resistance: The Repercussions of Change. *Leadership & Organization Development Journal*. Vol. 14. No. 6. pp. 30-36.
- Olkkonen, T. 1994 *Johdatus teollisuustalouden tutkimustyöhön*, 2nd edition. Teknillinen korkeakoulu, Finland. 143 p.
- Oyegoke, A. 2011. The constructive research approach in project management research. *International Journal of Managing Projects in Business*. Vol. 4. No. 4. pp. 573-595.
- Paton, R. A. & McCalman, J. 2000. *Change Management: A Guide to Effective Implementation*. 2nd edition, London, SAGE Publications. 280 p.
- Patton, M. Q. 2005. Qualitative Research. In *Encyclopedia of Statistics in Behavioral Science*. John Wiley & Sons, Ltd. Vol 3. pp. 1633 – 1636.
- Payne, V. 2005. *Planning and Managing Change*. AMACOM Books. Saranac Lake, NY, USA. 160 p.
- Pettigrew, A. M., Woodman, R. W., & Cameron, K. S. 2001. Studying organizational change and development: Challenges for future research. *Academy of management journal*, Vol. 44. No. 4, pp. 697-713.
- Piderit, S. K. 2000. Rethinking Resistance and Recognizing Ambivalence: A Multidimensional View of Attitudes Toward an Organizational Change. *Academy of management review*. Vol. 25. No. 4. pp. 783-794.
- Pinto, J., K. & Mantel, S., J. 1990. The causes of project failure. *Engineering Management, IEEE Transactions*. Vol. 37. No. 4. Pp. 269-276.

- Plant, R. 1989. Practical ideas for managing change and making it stick. *Industrial and Commercial Training*. Vol. 21. No. 5. pp. 15-17.
- Project Management Institute. 2014. *PMI's Pulse of the Profession: The High Cost of Low Performance*. February 2014. Project Management Institute, Newtown Square, Pennsylvania. Available: <http://www.pmi.org/Knowledge-Center/Pulse.aspx> Accessed: 06.08.2014.
- Prosci, 2014. [WWW] <http://www.prosci.com/> Accessed: 17.09.2014.
- Pugh, L. 2007. *Change management in information services*. Ashgate Publishing, Ltd. 230 p.
- Rising, L., & Janoff, N. S. 2000. The Scrum software development process for small teams. *IEEE software*. Vol. 17. No. 4. pp. 26-32.
- Rogers, E. 1962. *Diffusion of Innovations*. The Free Press of Glencoe, New York. 367 p.
- Rothwell, W. J., Stavros, J. M., Sullivan, R. L., & Sullivan, A. 2009. *Practicing organization development: A guide for leading change*. Vol. 34. John Wiley & Sons. 3rd edition. 704 p.
- Royce, W. W. 1970. *Managing the Development of Large Software Systems: Concepts and Techniques*. Proceedings of the IEEE WESCON. Vol. 26. No. 8.
- Salminen, A. 2000. *Implementing organizational and Operational Change - Critical Success Factors of Change Management*. Acta Polytechnica Scandinavica, Industrial Management and Business Administration Series No. 7. The Finnish Academy of Technology, Espoo.
- Sauser, W. I., & Sauser, L. D. 2002. Changing the way we manage change. *SAM Advanced Management Journal*. Vol. 67. No. 4. pp. 34-39.
- Scrum.org. 2014. [WWW] <https://www.scrum.org/> Accessed: 24.09.2014.
- Sheth, J. 1981. Psychology of innovation resistance. *Research in Marketing*. Vol. 4. pp. 273-282.
- Sims, R. R., 2002. *Changing the Way We Manage Change*. Greenwood Press. Westport, CT, USA. 299 p.
- Sirkin, H. L., Keenan, P., & Jackson, A. 2005. The hard side of change management. *Harvard business review*. Vol. 83 No. 10. pp. 109-118.
- Stata, R. 1989. Organizational learning - the key to management innovation. *Sloan Management Review*. Vol. 30. No. 3. pp. 63-74.
- The Standish Group. 2013. *The Chaos Manifesto-Think Big, Act Small*. Available at: <http://www.versionone.com/assets/img/files/CHAOSManifesto2013.pdf> accessed on 15.07.2014.
- Turner, D. M, Hallencreutz, J. & Haley, H. 2009. Leveraging the value of an Organizational Change Management Methodology. *The International Journal of Knowledge, Culture and Change management*. Vol. 9. No. 9. pp. 1-34.
- Walsham, G. 2006. Doing interpretive research. *European journal of information systems*, Vol. 15. No. 3. pp. 320-330.
- Ward, J, & Elvin, R. 1999. A new framework for managing IT-enabled business change. *Information systems journal*. Vol. 9. No. 3 pp. 197-221.
- Weisbord, M. R. 1976. Organizational diagnosis: Six places to look for trouble with or without a theory. *Group & Organization Management*. Vol. 1. No. 4. pp. 430-447.
- Yin, R. K. 2009. *Case Study Research Methods*, 4th ed. California. SAGE Publications. 219 p.
- Young, T. L. 2013. *Successful project management*. Kogan Page Publishers. Vol. 52. 208 p.

APPENDIX 1: INTERVIEW QUESTIONS - FINNISH

Kerro alussa: Kiitos, nauhoituksesta, käyttötarkoituksesta (Ei nimiä), haastattelun rakenne ei ennalta päätetty, saa eksyä aiheesta (keskustelu), kerro diplomityöstä (BCM vs. tekninen MUHA, ei YT) ja syy, miksi valittu tähän haastatteluun.. Ei ihan tuntia. Kysymyksiä toteutuksesta.

- Virallinen titteli ja /Mitä teet yrityksessä? Oma rooli niissä?
 - (kauan ollut ja miten työtehtävät muuttunut siinä ajassa)
- Millaisissa projekteissa mukana (tyyppi, kesto, rooli, mukana olleiden ihmisten määrä, hinta/koko)
- Seuraanko projektien toteutus yrityksen projektinhallintamallia? (miksi, miksi ei)
- Eroaako yrityksen projektinhallinta jotenkin aikaisemmista (projekti)hommista?
- Miten projektin onnistumista arvioidaan?
- Mitä sinulle henkilökohtaisesti tarkoittaa onnistunut projekti?
 - (arvosanoin, lessons learned, kuka arvioi, kannustin, tehdäänkö aina, kerätäänkö palautetta kaikilta keneen vaikutusta- tai olisiko sille tarvetta)
 - Missä vaiheissa onnistumista arvioidaan
- Mikä puolestaan taas on epäonnistunut projekti?
 - (oletko ollu tekemisissä yhdenkään epäonnistuneen projektin kanssa)
- Käyttäjätyytyväisyyden rooli onnistumisen arvioinnissa?
- Mitä sinulle sanoo BCM? (omin sanoin)
- PM vs. BCM erot tai yhteys?
- Kuinka hyvin oletko tietoinen yrityksen BCM templateista, tuesta ja käytännöistä? (koulutus)
 - Mitä mieltä niistä?
- Mitkä on tärkeimmät BCM:n osa-alueet? Mikä on BCM:n ydin?
- Onko omissa projekteissa törmännyt BCM:n? Sovelletaanko teidän osastolla?
- Oliko kokemukset positiivisia/negatiivisia/millaisia
- Kuka piti huolen BCMstä
- Missä vaiheessa BCM otettiin mukaan (missä vaiheessa pitäisi?)
- Mitkä työkalut? mistä pidit, mikä turhaa, mikä hyödyllistä
- Jos et ole törmännyt, miksi et?

- Pidätkö BCMää tärkeänä projektin onnistumisen kannalta?
 - (vai onko extraa mitä tehdään jos projekti on tarpeeksi iso ja on rahaa/aikaa)
- Näetkö, että omissa projekteissasi/tiimissäsi käytettäisi BCM työkaluja?
 - Miksi/Miksi ei?
 - Millaisia työkaluja?
- Minkä takia näitä työkaluja ei mielestäsi käytetä?
- Muutosvastarinta, iso ongelma?
- Miten paljon valmis panostamaan BCM:n (projektin resursseista)?
- Miten paljon olisi mielestäsi hyvä panostaa?
 - (%resursseista tai ihan työtunneista, viikottaisesta/kk työstä)
- Miten laaja malli sopisi (jos ajattelet omia/omalla osastolla pyöriviä projekteja)?
- Mitkä osa-alueet tärkeitä?
- Kaipaanko mallilta jotain erityistä?
- Miten olis ihanteellista hoitaa projektin BCM? (niin, että PM tekee, joku tiimiläinen hoitaa, joku muu (kuka) hoitaa) Toimiva vastuiden implementointi
 - Jos et sano PM, mitä pitäisi tapahtua, että ottaisit sen omalle vastuulle?
 - Kenen olisi hyvä seurata, että se tapahtuu (vaikka ei itse hoida), JORY, PM?
- Nyt kun lähdetään tekemään sitä uutta mallia: Miten sitä olis hyvä viedä/myydä projektipäälliköille?
- Miten näät BCM:n tulevaisuuden yrityksessä?
- Jäikö jotain sanomatta, haluatko vielä kommentoida jotain

APPENDIX 2: INTERVIEW QUESTIONS - TRANSLATED

Say in the beginning: Thank you for having time for this interview, about recording, usage of the tape (no names), structure of the interview not decided beforehand, it's ok to drift away from the topic (discussion), tell about the thesis, (BCM vs. technical change management, no layoffs), you are selected for this interview.. Won't take a full hour. Questions about the execution?

- Official title and what are you doing in the company? Your own role?
 - (How long have you been in the company and has your job description changed)
- What kind of projects are you involved in? (type, length, role, amount of people involved, cost/size)
- In your projects, do you use the project management model of the company? (why?)
- Does project management in this company differ in any way from the project management in your previous jobs?
- How do you evaluate project success?
- What do you personally consider as a successful project?
 - (grades, lessons learned, how evaluates, incentives, do you always evaluate it, do you collect feedback from everyone who's involved and/or would that be feasible)
 - When is the evaluation done
- What is a failed project? (Have you been involved in a failed project)
- The role of end user satisfaction in project success?
- What do you understand by Business Change Management (BCM)? (Your own words)
- PM vs. BCM differences or connection?
- How familiar are you with the BCM templates, support and practices of the company? (training)
 - What do you think about them?
- What do you see as the core of BCM?
- Have you encountered BCM practices in your own projects? Is it applied in your own organizational unit?

- Were the experiences positive or negative?
- How took care of the BCM?
- Do you consider it important? (why, why not?)
- In which stage was BCM included (in which stage should it be included)?
- Which tools did you use? What did you like, what was redundant, what was useful
- If you haven't encountered BCM, why not?

- Do you consider BCM important in project success?
 - (or is it something extra what is done if the project is big enough and has enough resources)
- Do you think that the BCM tools could be used in your own projects/in your own team?
 - Why not?
 - Which tools?
- Why do you think people are not using the tools?

- Change resistance, big problem?

- How much are you willing to put project resources into BCM activities?
- How much do you think would be a theoretical ideal?
 - (% of project resources or working hours, weekly or monthly working time)

- How extensive model would best serve the projects in your organizational unit?
- Which parts of BCM in your opinion matter the most?
- What do you wish to be included/taken into account in the BCM model?

- Who should take care of the BCM in a project? (So that PM does it, someone from the project team, someone else (who) takes care of it)
 - What would be a working role and responsibilities implementation?
 - If not PM -> what should happen that you would take care of BCM
 - Who should supervise that BCM activities are happening? (PM, executive team..)

- Now that I'm creating the BCM model: Do you have any ideas on how to sell it to project managers?

- How do you see the future of BCM in this company?

- Did you forget to say something, or did you get any ideas/comments/thoughts during this interview, that you would still like to say or ask?

APPENDIX 3: THE BCM MODEL

