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Change Management

A clarification of the gap between Change Management practice and research

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Change Management

Not only an extra seasoning thrown onto a project, but de facto an ingredient that determines success.

A clarification of the gap between Change Management practice and research.

A case study on a company in the ICT industry.

By

Zewar Bahadin

Master of Science Thesis TRITA-ITM-EX 2020:347
KTH Industrial Engineering and Management
Industrial Management
SE-100 44 STOCKHOLM

Förändringsarbete

Inte bara en extra krydda som bör tillsättas i ett projekt, utan snarare en ingrediens som avgör framgång.

Ett klargörande av skillnader mellan Change Management forskning och praxis.

En fallstudie på ett företag inom IKT-branschen.

Av

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Approved 2020-06-12	Examiner Monica Lindgren	Supervisor Marianne Ekman Rising
	Commissioner	Contact person

Abstract

Change Management (CM) plays a key role to manage an individual, a group, or an organization from a current state to a desired future state. The purpose of CM is to promote and support activities and actions to higher productivity levels and higher adoption rates simultaneously as stakeholder's commitment, comfort, and confidence increase in e.g. new solutions, services, products, systems, tools, methods, or ways of workings Previous research claims a gap between CM theory and practice exists, and that a vast number of theories and models available to academics and practitioners is both contradictory and confusing, and that limited empirical evidence supports of the plethora of CM frameworks and models. Thus, this study investigates and clarifies CM-related activities and factors, that could contribute to bridge the gap between practice and research. Regarding the research process, this study builds upon a literature review and a case study. Additionally, a conceptual CM model is composed which builds upon CM-related aspects, activities, enablers, and factors. The case study focuses on lessons learned and current CM practices. In the latter parts of study is the conceptual CM model applied to the empirical findings to find and analyze differences and gaps between practice and theory. At last, is it concluded that no single CM model alone, covers the plethora of activities and factors that are listed in the conceptual CM model. Hence, this study recommends both practitioners and researchers to take multiple CM models into consideration, to support and potentially improve CM practices. In conclusion, this study confirm that a research gap exists between practice and research, as several significant and distinguishing CM-related activities and factors, have been identified and analyzed.

Keywords: Change, Management, Organizational, Leadership, Business, Successful, Process, Activity, Approach, Aspects, Enabler, Factor, Framework, Guideline, Method, Model, Practice, Technique, Tool.

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Godkänt 2020-06-12	Examinator Monica Lindgren	Handledare Marianne Ekman Rising
	Uppdragsgivare	Kontaktperson

Sammanfattning

Change Management (CM) utgör en essentiell managementdisciplin som fokuserar på att möjliggöra en effektiv styrning och hantering och individer, grupper och organisationer genom att facilitera aktiviteter för att uppnå en förbättrad och högre nivå av förändringsbenägenhet, organisatorisk produktivitet, samtidigt som både externa och interna intressenters engagemang, delaktighet, tillit och adoption av nya lösningar, tjänster, produkter, system, verktyg, metoder eller arbetssätt ökar eller förbättras. I tidigare forskning påstås det finnas ett gap mellan teori och praxis-fältet. Parallellt, påyrkas det även att ett stort antal teorier och modeller som akademiker, experter, tjänstemän, lekmän ofta tillämpar eller relaterar till kan vara både motsägelsefulla och osammanhängande. Därutöver, anses det även att begränsade och bristfälliga empiriska bevis tillhandahållits nutilldags för att stödja den mångfald av CM-relaterade modeller, ramverk och tillvägagångssätt. Således, är syftet med denna studie att identifiera och granska CM-relaterade aktiviteter och faktorer som kan bidra till att överbrygga klyftan mellan CM-forskning och praxis. Med hänseende till forskningsprocessen, baseras denna på både en litteraturgenomgång, en konceptuell CM modell och en fallstudie som är utförd på ett företag inom IKT-branschen. Den föreslagna och konceptuella CM-modellen bygger på CM-relaterade aktiviteter och faktorer. Vidare fokuserar fallstudien på en aktuell CM strategi, samt erfarenheter och lärdomar från tidigare och avslutade projekt. Studien är dessutom avgränsad till planerade, strategiska och tvärfunktionella projekt. Yttermera, tillämpas den konceptuella modellen senare på de empiriska resultaten med avsikt understödja identifieringen och analysen av bristfälligheter och skiljaktigheter mellan teori och praxis-fältet. Avslutningsvis, dras slutsatsen att ingen CM-modell som identifierats i CM-litteraturen i avskildhet täcker mängden av aktiviteter och faktorer som anges i den föreslagna konceptuella CM-modellen. Således, rekommenderas det i denna studie att organisatoriska experter, tjänstemän och akademiker bör ta hänsyn till, samt integrera åtskilliga CM-modeller, med avsikt att främja och sålunda potentiellt förbättra handlingssätt och utföranden relaterade till CM-relaterade aktiviteter och procedurer, på ett mer allomfattande, metodiskt och effektivt vis. Därtill, bekräftas det i denna studie att det finns ett faktiskt gap mellan forskning och praxis fältet, då ett flertal avvikande och särskiljande CM-relaterade aktiviteter och faktorer har identifiserats, analyserats och diskuterats.

Nyckelord: Förändringsarbete, Förändringsledning, Förändring, Organisation, Ledarskap, Företag, Framgångsfaktor, Process, Aktivitet, Approach, Strategi, Aspekt, Möjliggörande, Faktor, Ramverk, Riktlinje, Metod, Modell, Teknik, Verktyg.

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Zewar Bahadin

Zewar Bahadin
Stockholm, June 2020

1. Introduction

This chapter introduces the study and its background. Additionally, the problem statement and purpose are presented. Finally, are the research question, scope and delimitations of outlined.

1.1 Background

The business world is changing faster than ever before in history (Chaudhry & Kashif, 2016; Kempster et al., 2014), as today's business environment is both hostile and fast-moving (De Biasi, 2018; Speight, 2000). Thus, the frequency of change has increased in all types of organizations (SEO et al., 2012). Consequently, organizational change has become the rule rather than the exception (De Biasi, 2018; Holten & Brenner, 2015), as change has become synonymous with standard business practice (Makumbe, 2016). Organizational change initiatives are often triggered as a response to both internal and external drivers (Allen et al., 2007; Avila & Garces, 2017; Fuchs & Prouska, 2014; De Biasi, 2018), such as; new management strategies (Wissema, 2000), globalization (Speight, 2000), economic repercussions (Price & van Dick, 2012), changing customer demands (Augustsson et al., 2017), market shifts, changes in demographics (Rock, 2012), new business models, automatization (de Biasi, 2018), the introduction of new technologies, changing labor force (Allen et al., 2007), political and regulatory changes (Paul, 2015). In fact, organizational change is today not only desirable but also considered as a necessity for survival (Price & van Dick, 2012; Fuchs & Prouska, 2014) and as a means to increase revenue growth, decrease costs (SEO et al., 2012), or to increase overall competitiveness (Allen et al., 2007; Paul, 2015). Thus, companies are often eager to crack the code of change (Beer & Nohria, 2000).

Change Management (CM) is an academic discipline (Kempster et al., 2014), within the field of organizational development (Dievernich et al., 2016). The difference between CM and Project Management (PM) is that PM focuses on tasks or technical aspects, while CM focuses on the people affected by the change (Voehl & Harrington, 2017). CM however coincides with PM, as the management of change often occurs in parallel to PM (Padar et al., 2017). Central to the entire CM discipline is the conviction and doctrine that planned CM-related interventions and efforts are feasible and contribute to organizational success (Rothwell et al., 2015; Voehl & Harrington, 2017). Thus, the purpose of CM is to support the movement of an organization and its people from a current state, through a transition phase, to a desired future state (Voehl & Harrington, 2017; Goncalves & Campos, 2016; Harkness, 2000). CM involves organizing resources and capabilities into change initiatives and interventions that deliver results greater than the actual costs and efforts of CM (Rock, 2012). In contrast, organizations that do not adopt CM might encounter risks related to project failures, and erosion of organizational capabilities (Jayashree & Hussain, 2011). The management of change is therefore a highly required managerial skill for any organization (By, 2005).

CM has been an integral part of the corporate lexicon for decades (Jayashree & Hussain, 2011). Therefore, CM is by no means anything new to organizations. Despite this, are effective, sustainable, and successful CM practices highly debated among researchers and practitioners (Heckmann et al., 2016; Voehl & Harrington, 2017). Consequently, researchers have highlighted considerable and critical attention to the research domain (Fuchs & Prouska, 2014). Along a similar line have articles and publications on the topic grown dramatically in the last two decades (Heckmann et al., 2016). Despite the abundance of publications on CM and the plethora of CM frameworks and models that exist, more research is needed to bridge the gap between theory and practice, as a means to gain a better understanding of improved CM practices (Raineri, 2011; Errida et al., 2018).

1.2 Problem Statement*: Relevance of this study*

Problem Statement
Many researchers are arguing that applying CM frameworks and models in a meaningful and sustainable manner is difficult (Satell, 2019; Bordeleau & Felden, 2019; de Biasi, 2018; Stouten et al. 2018). Therefore, this study will focus on clarifying the gap between CM practice and theory with more empirical research by focusing particularly on CM-related activities and factors, because:

• *Although previous studies claim that a gap between CM practice and theory exists, exact differences are neither presented nor discussed in detail (Heckmann et al. 2016; Raineri, 2011).*
• *The vast number of theories and models currently available to researchers and practitioners are considered being both contradictory and confusing (de Biasi, 2018; Dievernich et al., 2016).*
• *Limited empirical research has been provided in support of the vast amount of CM frameworks and models (By, 2005).*
• *There is a continuing need for situational and contextual CM approaches to manage change (Al-Haddad & Kotnour, 2015; Bruch et al. 2005; Kotter & Schlesinger, 1979).*
• *There is still a continuing need for determining the critical factors, that contribute to improving the success rates of organizational change initiatives (Errida et al., 2018; Nasim and Sushil, 2011; Meyer & Stensaker, 2006).*

Thus, is the problem statement (*above*) considered being both relevant and aligned with inadequacies in the research domain. The clarification of this problem statement is furthermore intended to provide direction and guidance in the research process of investigating, understanding, and analyzing CM practices.

1.3 Research Purpose and Question

Purpose
The purpose of this study has been to identify, clarify and compare Change Management-related activities and factors, that could potentially contribute to bridging the gap between practice and research.

Research Question
What Change Management-related activities and factors can be identified?

1.4 Delimitations*: Scope*

This study takes a broad and yet practical approach to CM. The scope and delimitations are described and visualized (see Figure 1) in further detail, in this section below.

To fulfill the purpose, an initial aim has been to review the CM literature, identify and clarify CM-related activities and factors, and thus organize these in a systematic, pragmatic, and conceptual CM model to simplify the comparison and analysis of the theoretical and empirical findings. The activities and factors derive from 50 theoretical CM frameworks and models. These frameworks have been selected as this study takes a wide approach to CM. Specifically, have these models been selected as they meet the criteria of being either descriptive or processual models, simultaneously as satisfying the criteria of targeting change on three levels, namely on an individual, group, or organizational level (*these change types are described in further detail in the theory chapter*).

In parallel to the literature study, a two-folded case study has been employed within a real-life context at a case company to generate new ideas that can facilitate a better understanding of how CM has been applied in both past and present projects, and thus identify activities and factors, that can contribute to bridging the gap between practice and theory. The case company is a global ICT and telecom provider, active in over 100 countries and has in practice a centralized and matrix-like organizational structure. Regarding the empirical findings, the studied projects and CM-related approaches and methods in the case study have furthermore been delimited to the following characteristics; cross-functional, planned, strategic, and top-down managed (Alvesson & Sveningsson, 2015; Maes & Van Hootegem, 2011; Pettigrew, 1985). Subsequently, the case study has firstly focused on past projects, to investigate, clarify, and analyze experiences and lessons learned from the application of CM practices. Secondly, has a CM strategy been scrutinized (*that is currently applied at the case company*).

Lastly, differences between the theoretical and empirical results have been analyzed and discussed, as a means to enhance understanding in CM practices, extract new and valuable insights that can clarify, and potentially bridge the gap between practice and research. The research question along with the problem statement, research purpose, and delimitations have furthermore served as a guide for the research process, content, and outcome of this study.

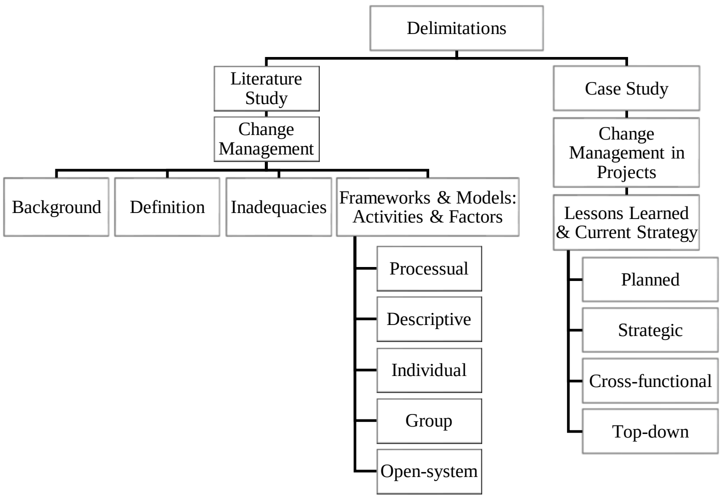

Figure 1. *Overview of the Scope and Delimitations in this Study*

2. Research Methodology

The chapter provides a detailed explanation of the research methodology and process. First, an overview of the research strategy is presented. Thereafter the research philosophy, approach, data collection, limitations, and last ethics will be discussed.

2.1 Research Process*: An Overview*

To fulfill the purpose of this study, namely, to investigate clarify and understand CM practices in-depth, a dedicated and contextual research methodology has been chosen to set the foundation of the entire research strategy. To simplify for the reader is a high-level description of the full research process illustrated in figure 1 below.

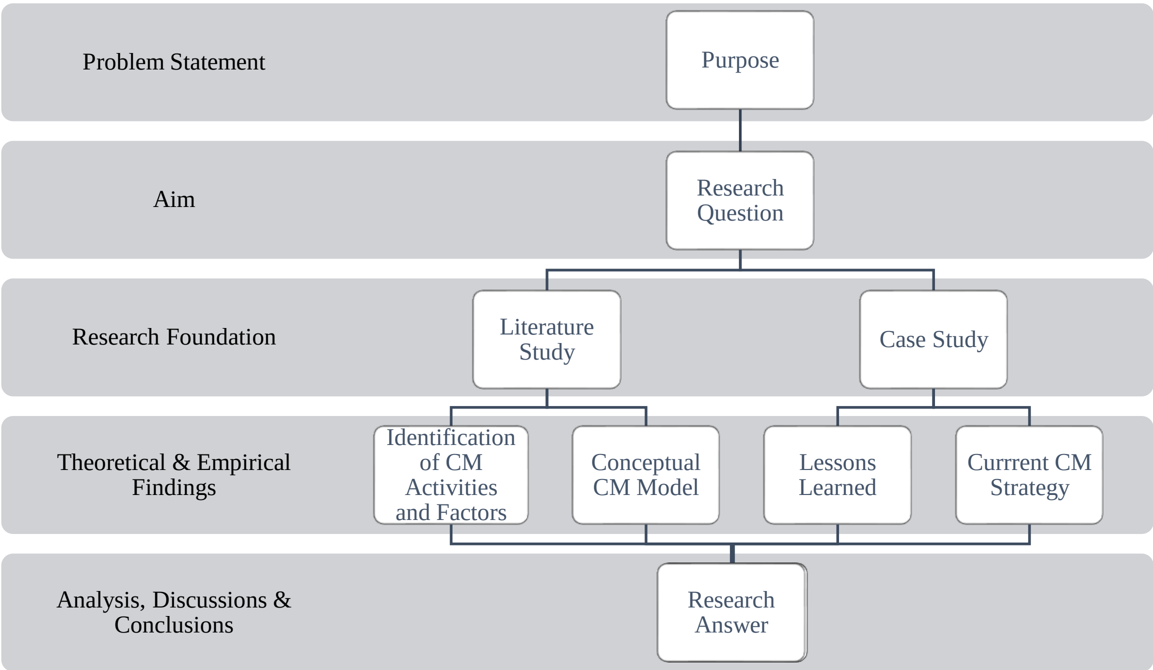

Figure 2. *Research Process*

2.2 Research Philosophy*: Epistemology and Positivism*

The sets of ideas of knowledge, beliefs, interpretations, methodological choice, data collection and analysis in this study has followed an epistemological and positivistic research philosophy, as the focus has been on assumptions, perceptions, experience, and recommendations addressing models, methods and best practices related to CM, in the context of planned, cross-functional, discontinuous, strategic and top-down managed change interventions at a global company. Easterby-Smith et al., (2015) define the epistemological approach as appropriate when a researcher aims to identify and understand theoretical knowledge in the best possible ways, while a Saunders et al., (2009) claims that positivism entails research focusing on a social reality that generates results, findings, conclusions and ultimately generalizations.

2.3 Research Approach*: Abductive and Qualitative*

Abductive Approach

The methodological approach and choice of the study have been abductive and qualitative. This can be explained in that a plethora of CM models and conceptual CM models have been identified, assessed, and brought together to form a conceptual model. The conceptual model is later, in the analysis and discussion chapter applied and compared to the empirical findings. Patel and Davidson (2012) claim that this is an inductive way of relating theory to an empirical study. As the conceptual model also was applied to a real case study, the study also falls into the approach of being deductive. A combination of a deductive and an inductive approach is what Patel and Davidson (2012) define as an abductive approach consisting of abductive reasoning. When and if a researcher moves back and forth in the research process between theories and empirical data, an abductive approach is recommended by Saunders et al. (2009). Furthermore, this approach has been chosen to prevent limitations in the research process, which can happen if one chooses an approach (Patel & Davidson, 2012).

Qualitative Method

Furthermore, this study holds a qualitative methodological choice. This method has been chosen since the aim of the study is to gain a deeper understanding of CM-related activities and factors in the CM literature, how these can be organized in a structured and systematic manner, how an organization has implemented CM in the past, as well as how they are currently conducting CM practices, as means to bridge the gap between theory and practice. Additionally, both the theoretical and empirical findings can be defined as non-numerical. These above-mentioned aspects are furthermore in line with Saunders et al., (2009) and Creswell (2014) claims to be reasons to choose a qualitative method.

2.3 Data Collection and Analysis: *Literature and Case Study*

In short, this study is built upon a literature review and a case study. The literature study is based on peer-reviewed articles, publications, and books, and has resulted in a theoretical frame of reference. This includes CM definitions, types of change, inadequacies in the CM literature, an analysis of CM frameworks, and lastly a proposed and conceptual CM model. On the other hand, the case study is based on semi-structured interviews and internal documents, in which lessons learned and current CM strategy has been presented, analyzed and discussed, in relation to the conceptual CM model.

Literature Review

The purpose of the literature review was to identify relevant sources, describe key concepts and key issues, and ensure an in-depth understanding of the CM. This review serves furthermore as a theoretical lens, and framework which guides and supports the analysis, discussions, and conclusions, to provide answers to and fulfill the purpose of the study, namely, to bridge the gap between practice and theory. Sources and references have been found through various research databases, journals, and search engines due to the possibilities of accessing a wide array of peer-review publications. These search engines refer to the Royal Institute of Technology's library database called “Primo”, “Google Scholar” and “Web of Science”. An example of an often-used journal from which 16 publications have been incorporated, refers to the Journal of Change Management.

This journal is provided by the contributor and database Taylor & Francis, and the journal is described as to take a wide approach to the CM discipline, as it is both multidisciplinary, international, and popular for addressing critical, mainstream, and alternative contributions. Additionally, the search and keywords that are used to identify articles and publications are listed in Table *1*. Table 1 depicts the main keywords, keywords related to frameworks and models, and other keywords that have been used interchangeably.

Table 1. *Literature Study: Search and Keywords*

Main Keywords	*Change, Management, Organizational, Leadership, Business, Successful, Process.*
Keywords related to Frameworks & Models	*Activity, Approach, Aspects, Enabler, Factor, Framework, Guideline, Method, Model, Practice, Strategy, Technique, Tool.*
Other Interchangeable Keywords	*Adoption, Changeability, Communications, Company, Cross-functional, Employee, Global, ICT Industry, Global, Individual, Leader, Manager, People, Planned, Project, Stakeholder, Strategic, Success, Team, Top-down, Transformation, Transition.*

Case Study

The purpose of the case study was to employ a rigid and reliable method to collect, structure, and analyze the empirical findings. Robson (2002) suggests applying a case study as a research strategy when one aims to investigate a phenomenon within a real-life context, while Yin (2003) describes the usability of a case study as a means to set up a better understanding of a phenomenon. This description is therefore considered to be suitable in the context of this study, namely to study CM practices at a global ICT company. The empirical findings are furthermore meant to be used as means to find differences (*compared to theory*), discuss, and understand CM practices from new perspectives, and thus strive to bridge the gap between practice and research.

The case study includes two parts. One part that revolves around past experiences and lessons learned and another that focuses on the current application of CM practices. The reason why the case study focuses on lessons learned, originates from a combination of a research claim and an assumption made by the author of this study. The assumption refers to that capturing lessons learned can prevent organizations from making the same mistakes in the future and contribute with actionable knowledge and insights that can improve the outcome of future efforts, whereas the researchers (*see the theoretical inadequacies in the next chapter*) have expressed that a challenge is that practitioners are encountering difficulties when it comes to learning from lessons learned and past experience, and in such manner improve CM practices further.

The identified lessons learned are based on four projects (*which are held anonymous*), in which CM practices and activities have been investigated as a retrospective study. These CM-related aspects are either covering or related to descriptions, experiences, interpretations, or claims from a set of interviewees in this study. These revolve around learnings, things that worked well and understanding why, opportunities, strengths, and positive aspects, good decisions made and effective actions taken, managerial experiences and challenges, poor or inadequate actions and decision, risks, and mistakes, what went wrong and why, recommendations on what could be done differently in the future, aspects that should be tried out, and aspects that the company should hold on to. The lessons learned have been coded, distilled, interpreted, and presented as clear-cut challenges or recommendations to simplify the comparison with theory in the analysis and discussion chapter. Apart from lessons learned that have been investigated and analyzed, a currently applied CM strategy has been reviewed, as a means to discover new insights and understand how an ICT company's approach to CM. Towards the end of this study, the lessons learned and the current CM strategy are analyzed and discussed in-depth, in relation to the theoretical framework. At last, differences are presented and summarized, to bridge the gap between practice and research.

Semi-structured Interviews

In this study, semi-structured interviews have been selected, as these are the most optimal type of interview technique for gaining in-depth understanding whilst covering a broad array of themes, topics and target areas (Höst et al., 2006). Moreover, semi-structured interviews are recommended in qualitative studies, as this technique is more flexible (King, 2004). Regarding the interview sampling, the respondents or interviewees have been chosen exclusively due to their involvement and expertise in either past projects (*related to lessons learned*) or in current projects (*related to current CM practices*). It is also important to point out that these respondents or interviewees make up only a fraction or subset of the entire population of leaders and managers involved in CM or PM at the case company. Before the actual interviews, the interviewees were contacted via email. During the interview process a set of different topics and themes focusing exclusively on CM activities and factors, practices, enablers, methods, processes, and guidelines (*see interview template listed in the appendix*). As viewed in table 2 below**,** 26 interviews have been conducted in total. The interviews have furthermore been conducted either in-person at the company's office, or virtually through an online and internet-based communications software. The type of interview method is not considered to have affected the intension or outcome of the interviews as leaders and managers at the case company are considered to be familiar with both types of interactions (*in-person and virtual*).

Altogether, the interviews have solely taken 18.5 hours to conduct, apart from the coding process. These interviews were also spread across 21 interviewees, as a couple of the interviewees have been interviewed twice. About half of the interviews have focused on or addressed lessons learned, a quarter on the business transformation program, and a quarter on the current CM strategy. Additionally, was about half of the interviews conducted in person, while the other half were conducted virtually. Furthermore, none of the interviews were recorded. After the actual interviews, all the answers were assessed, coded, and organized to fit the themes and structure of the conceptual CM model (*to simplify the analysis and comparison in the latter parts of the study*). In retrospect, this approach has e.g. been an efficient way to make the most out of the data (*make sense of what has been said during the interviews*) and thus manage the coding process in a structured manner, as means to identify similarities and differences.

Table 2. *Interviews*

Interviewee	Focus area	Role	Duration (h)	Method	Date
1	Lessons Learned	Change Lead	2	In-person	2020-01-20
2	Lessons Learned	Line Manager	1	In-person	2020-01-20
3	Lessons Learned	Sales Director	1	In-person	2020-01-21
4	Lessons Learned	Process Architect	1	In-person	2020-01-22
5	Lessons Learned	Head of PMO	1	In-person	2020-01-22
6	Lessons Learned	Project Manager	1	In-person	2020-01-31
5	Lessons Learned	Head of PMO	1	In-person	2020-02-03
7	Lessons Learned	Change Lead	1	In-person	2020-02-10
8	Lessons Learned	Process Architect	1	In-person	2020-02-10
9	Lessons Learned	Head of Market Area	1	Virtual	2020-02-10
9	Lessons Learned	Head of Market Area	1	Virtual	2020-02-12
10	Lessons Learned	Change Lead	1	Virtual	2020-02-12
11	Current CM strategy	Change Lead	1	In-person	2020-02-13
12	Current CM strategy	Business Analytics	1	In-person	2020-02-20
13	Current CM strategy	Change Lead	1	In-person	2020-02-21
6	Lessons Learned	Project Manager	1	In-person	2020-02-24
14	Current CM strategy	Program Manager	1	Virtual	2020-02-24
15	Lessons Learned	ERP Manager	1.5	Virtual	2020-03-12
16	Lessons Learned	ERP Manager	1.5	Virtual	2020-03-12
17	Current CM strategy	Change Lead	0.5	Virtual	2020-03-13
18	Current CM strategy	Process Manager	0.5	Virtual	2020-03-27
19	Current CM strategy	Change Lead	0.5	Virtual	2020-03-31
20	Current CM strategy	Change Lead	0.5	Virtual	2020-04-02
4	Current CM strategy	Process Architect	0.5	Virtual	2020-04-03
21	Current CM strategy	Change Lead	0.5	Virtual	2020-04-16
19	Current CM strategy	Change Lead	0.5	Virtual	2020-05-20

Internal Document Studies

In this study, data from internal documents have also been reviewed to learn more about the case company, to read up about the transformation program and projects. Although the document studies have formed only a limited set of empirical findings, they have contributed to in-depth descriptions, explanations, and understanding of the transformation program, projects and current CM strategy.

2.4 Research Criticism: *Limitations and Quality*

Below will the limitations and quality in the study be discussed in relation to reliability, validity, and generalizability. The main weakness of this study is that it takes a broad approach to CM practices. Thus, might the analysis, discussions, and conclusions be perceived to be vaguely delineated. Yet, critical and underlying challenges and weaknesses related to CM practices highlighted, all in with the problem statement and purpose. In summary, this study is considered to have a low-to-medium validity, low reliability, and low generalizability due to all of the aspects and reasons discussed in the section below.

Reliability, Validity and Generalizability

Validity, reliability, and generalizability are important concepts to reflect upon in social science research. The validity refers to the extent the accuracy in results and conclusions in relation to the purpose and aim of a study, reliability revolves around to what extent a study (*and its results*) can be replicable by other researchers, while generalizability refers to what extent the conclusion is appropriate and can be applied in another and more general setting (Collis and Hussey, 2014).

Assumptions and Delimitations

This study is limited to the scope (*outlined in the introduction chapter*), relevance theoretical framework, and the composition of the conceptual CM model. In other words, all these above aspects are likely to influence and affect the validity, reliability, and generalizability of this study. When it comes to scope and delimitations have been limited to cover projects that satisfy and meet the following criteria simultaneously. The projects must be characterized by a high level of cross-functional work across departments and functions, the projects must be considered as discontinuous (*differ heavily from continuous improvement projects*), the projects must be planned long ahead (*differ from spontaneous and emergent projects),* the projects must be strategic and top-down driven in the context of the organizational structure (*differ from bottom-up generated or managed projects*), simultaneously as particular CM leaders and managers are involved, and dedicated CM practices have been or are applied in parallel to the projects.

Additionally, are the theoretical findings considered to cover a broad array of CM-related activities and factors from what researchers claim to be CM frameworks and models. In this regard, the assumption is that covering such a broad set of factors contributes to enhancing the theoretical relevance and thus enhancing the validity of the analysis, discussions, and conclusions as these parts rest upon the theoretical findings composed and listed in the conceptual CM model.

A drawback with the conceptual CM model that is proposed in the theoretical framework chapter, revolves around the way it has been combined, merged, and categorized (*under six phases and four activities*). A concrete example refers to the reliability of how CM activities and factors based on diverse types of CM models and frameworks interchangeably have combined into a proposed conceptual CM model. A consequence of this is that it may cause difficulties for other researchers to replicate such a proposed model, despite that it is entirely based on key activities and factors listed in the identified CM models. Moreover, it is likely that other CM models and frameworks (*that are not incorporated into this study*) might have been undiscovered or excluded. This refers to CM models and frameworks that actually fit the selection criteria's, and could potentially be appropriate and useful to incorporate in this particular study, but instead due to the selected key words, bias in the identified CM articles and publications or due to ignorance, human error or bias of author. have been either undiscovered or excluded.

On the other hand, is it also possible that other researchers might consider that all of the models and frameworks that are included and incorporated in this study might not be appropriate to use, in the context of the scope and delimitations of this particular study. The reason why lesson learned have been addressed rests on the assumptions that by not learning from project successes and failures, an organization might be doomed to repeat similar mistakes. Moreover, is it assumed as a beneficial for individuals, groups and an organization to reflect upon, distill and review learnings, best practices and insights, which can then be taken into account and applied to current or future projects. Consequently, the author believes that an identification and analysis of lessons learned is critical to enhance the validity of the study, especially in the context of the case company.

Research Methodology and Case Study

Changes in the research process could also mitigate and tackle some limitations in this study. For instance, could structure interviews contribute to improved validity in the empirical finding, analysis, and conclusions. Additionally, the empirical findings are composed of solely qualitative methods, as a means to gather, understand, and theorize upon how the gap between research and practice could be bridged. The analysis, interpretations, and discussion might imply some bias. In contrast, quantitative methods and measures could also be leveraged to support and quantify the significance of the findings, analysis (*related to the lessons learned and the current CM strategy*), and conclusions.

Semi-structured interviews combined with internal document studies have been an effective method to gain in-depth analysis of lessons learned and current CM practices at the case company. A disadvantage with interviews might however be that the results are exposed to subjectivity from both the interviewees (*who are sharing insights, knowledge opinions, perceptions, and experiences*) and the researcher who intends to code, analyze and summarize the phenomenon and empirical findings related to CM practices. Despite that, Collis and Hussey (2014) claim that qualitative studies and data sources contribute to a higher degree of validity compared to quantitative studies. Moreover, a strength in this study refers to the number of interviews and interview hours that have been carried out. This has led to an extensive collection of data, which has made it possible to conduct a thorough analysis of the empirical findings.

Additionally, due to the five-month period of this study, assumptions, simplifications, and interpretations have been necessary to analyze and discuss the reality (*strengths and weaknesses, as well as advantages and disadvantages*) of the case company. Consequently, the implications on both the validity and reliability may be negative. For instance, all interviews related to the lessons learned were unique in the sense that assorted topics and themes that were discussed in different sequential orders, simultaneously as they focused on favorable and unfavorable, strengths and weaknesses from different viewpoints and perspectives. Additionally, the empirical findings likely to be biased toward the unique experience and perception of the limited set of interviewees at this particular company. Despite that notes were taken throughout all interviews, a weakness associated with the time-related limitations of this study, follow-up interviews were not conducted, as means to verify the validity of all aspects in the empirical findings, analysis, and conclusions. All together is the reliability likely to be low.

Conclusions
The conclusions are based upon and supported by one particular case study, and could therefore not be used to draw fully reliable and valid conclusions in completely other contexts such as in emergent and continuous projects, in complete culture makeovers, in mergers and acquisitions, in organizations with different approaches to PM, digital and technological preconditions, control and reward systems, politics, culture, demography, structure or business model, in small and medium-sized enterprises, in nonprofit or public sector organizations or in other non-ICT-related organizations. However, if another company with similar prerequisites (*in a similar context, e.g. a company in the ICT industry, with a similar corporate culture and organizational challenges)* would apply the same scope, research process, theoretical foundation, and proposed conceptual CM model, then the overall generalizability would possibly increase. Additionally, would multiple and similar case studies covering a broader array (*larger sampling size*) of interviewees, projects, and companies, be beneficial to achieve increased generalizability.

2.5 Research Ethics*: Confidentiality and Plagiarism*

This study undertakes the codex and recommendations from *The Swedish Research Council* of good research ethics by openly presenting the truth about the study, as the researcher continuously throughout the study has strived to describe and analyze the theoretical and empirical findings from an objective standpoint, and thus in a transparent manner accounting for a well-organized the research process, findings, and results (Swedish Research Council, 2017).

Additionally, the Swedish Research Council (2017) claims that "*information about identifiable persons should be noted, stored, and reported in a way that individuals cannot be identified by externals. This applies to information that might be ethically sensitive. This implies that it should be practically impossible for externals to retrieve the information*". Therefore, the case company, the projects as well as the interviewees altogether have been treated anonymously, as no names or precise titles of the interviewees, no specific details about the studied projects (*related to past and current projects*) have been revealed, nor has the company name been displayed. The intention of this approach has also been to set up an open and safe work environment as a means to open up for in-depth discussions related to both lessons learned and the current CM strategy. Furthermore, is it important to pinpoint that all interviewees have taken part voluntarily, as no compensation has been offered.

Regarding the report writing process (*especially in the literature review*), a direct, an indirect and a re-phrasing technique have been used interchangeably to quote, cite or paraphrase, sentences, phrases and sections. When it comes to the literature study, it is based on a vast number of peer-reviewed publications and articles, which have been referenced as means to clarify the origin of a text, sentence, or phrase. Therefore, the aspect of avoiding plagiarism has also actively been considered. Despite this, unintentional plagiarism might occur, as written phrases or sentences might appear similar or familiar to the original publication or text, while in other situations direct or indirect citations and quotations have been used with minor grammatical changes. However, where citations have been used, the exact words of a publisher or author have been stated along with the source.

3. Theoretical Framework

This chapter includes four main parts. In the first part, CM is defined. Secondly are different types of change categories are presented. These have been important in the literature review when it comes to the selection of the CM framework and models. The third part includes theoretical and practical adequacies, challenges, and gaps. These adequacies clarify and explain the need to bridge the gap between practice and research, in-depth. In the last part, the identified and selected CM models are presented, followed by detailed descriptions of how the activities and factors listed in the models and frameworks have been taken into consideration and summarized into a proposed and conceptual CM model. In short, the conceptual CM model is used as a baseline for the comparison and analysis with the empirical findings from the case study.

3.1 Change Management*: CM*

Many researchers have tried to define CM as there is a lack of a universally accepted definition (Brown et al., 2016). A classic definition of CM however refers to taking an individual, group, or organization from a current state or situation to a desired future state (Andrew, 2017; Gonçalves & Campos, 2016). Thus, is the process and management of organizational change referred to as CM. Yet, Haudan and MacLean (2001) describe CM as a journey, in which a high level of adoption and engagement is the destination. The engagement of stakeholders is moreover considered to be important as it enables an exciting, enlightening, and successful trip, as a means to reach high adoption rates, thus achieve the business results desired, from a state of aspiration to realization. In other words, is the purpose of CM not only to generate a great and predetermined CM plan. Instead, the core idea is to engage stakeholders in the organization in such a manner that stakeholders can think and act differently about the change (Haudan & MacLean, 2001). Along a similar line, Vanqa (2006) and Errida et al. (2018) defines CM as the process to manage the people-side of an organizational change to achieve desired outcomes. In contrast to the aforementioned definitions, By (2005) describes CM as the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing demands and needs of both external and internal stakeholders.

Yet another definition defined by Gonçalves and Campos (2016) emphasizes CM as the act of moving from a current state, through a transition phase, described as the valley of despair, into a future state. Their definition accentuates that change initiatives often cause an inevitable reduction in productivity among the concerned stakeholders, during the transition phase. They imply that the transition phase can be managed, whilst unfavorable implications can be reduced. Gonçalves and Campos (2016) furthermore claim that when a change is introduced, stakeholders must spend time learning what is going to change, developing new skills, get used to new ways of working, solutions, and tools. In parallel, might unfavorable reactions and a lot of mental energy among stakeholders shift into fear, anxiety, confusion, and worries. Consequently, are change initiatives are likely to meet a productivity drop, before changes begin to take root and rise (Gonçalves & Campos, 2016). Along a similar line, Rock (2012) pinpoints that the purpose of CM practices is to mitigate the productivity drop, whilst promoting strategies and actions that can lead to a higher productivity level, relative to the starting point when the change was introduced, simultaneously as adoption rates rise and stakeholders grow comfortable with and competent in the new solution, service, product, tool, method or way of working.

In other words, is the aim of CM to shift the impact of the change curve, and thereby lessen the productivity drop, and thereafter raise productivity levels, to realize the desired outcomes, faster (Rock, 2012). Moreover, does Gonçalves and Campos (2016) proclaim the idea that no change can occur without passing through the valley of despair, and simultaneously that organizations, projects, or stakeholders who camp in it, are exposed to more risks, and are therefore likely to suffer more. From this perspective, does CM serve as a guide that promotes change interventions and actions which makes it possible to take stakeholders involved in the change through this valley as quickly as possible (Gonçalves & Campos, 2016).

The point of departure for most theories is that CM needs to be planned, steered, controlled (de Biasi, 2018), and evaluated (Vlados, 2019). Along a similar line, Teczke et al. (2017) describe CM as a means to plan, initiate, realize, control, and stabilize change processes. A comprehensive and structured approach to CM is furthermore critical to the success of any project that aims at realizing a notable change (Andrew, 2017; Voehl & Harrington, 2017). This follows the assumptions and beliefs that CM practices allow organizations to consciously create potential and benefits that can result in a higher and long-lasting business impact (de Biasi, 2018). According to Vanqa (2006), CM also takes a wider scope, involving factors such as increased organizational effectiveness, increased employee motivation, increased employee creativity, strengthened organizational leadership, improved readiness for future changes (*changeability*), and enhanced organizational learning. These factors open up for a plethora of CM practices and change interventions that, when executed properly, and in consistency with internal and external stakeholders, can facilitate a successful enactment of organizational change processes (Raineri, 2011).

3.2 Types of Change

According to Al-Haddad and Kotnour (2015), CM models can be categorized into three different schools of thought, namely, individual behavioral, group dynamics, and open-system. CM models can also be defined as processual and descriptive models (Errida et al., 2018). These categories or types have been selected for four reasons. Firstly, these types have met the predetermined literature review criteria which are aligned with the delimitations of this study. Secondly, because these are common change types, used by many researchers. Thirdly, they have been useful for an efficient categorization of the plethora of change models and frameworks, identified in the CM literature. Fourthly, because this study takes a wide approach to CM activities and factors. The change types are nonetheless described in further detail below.

Schools of Thought: Individual, Group Dynamics and Open System
CM frameworks and models can be defined into three categories or schools of thought. These concerns; individual theories, group dynamics, and the open system school. Individual theories focus solely on individuals, and their reactions and behaviors. Such theories assume it is possible to affect and influence individuals to change when external consequences and effects are changed, or when change initiatives aid individuals' understanding of themselves and their environment. Theories related to group dynamics addresses changes on team and group level. Such theories imply that is the most effective way to realize change, as individuals' behaviors and actions are a function of a wider group environment. Therefore, change interventions are suggested to primarily focus on influencing the groups, teams, units, functions, as well as corporate culture, norms, roles, and values.

In contrast, open-systems theories emphasize and view an organization from a broader and more complex perspective. This theory furthermore views the organization as interacting subsystems of organizational goals, processes, activities, structures, systems, technicalities, corporate culture, and people (Al-Haddad & Kotnour, 2015).

Type of Framework or Model: Prescriptive vs Descriptive
Unlike the change types mentioned above, does Errida et al. (2018) introduce two distinguishing categories of CM models, namely descriptive and processual models. Processual models take into consideration sequential phases, actionable activities, steps factors, or guidelines. Oftentimes does processual CM frameworks and models have a clearly defined start and finish, and furthermore takes on CM from a more pragmatic perspective. In contrast, does descriptive models concern CM frameworks and models structured as inter-linked organizational activities and factors. Descriptive models are oftentimes overarching and takes a broader array of key organizational factors into consideration (Errida et al., 2018).

3.3 Inadequacies*: in the Change Management Literature*

Below is a plethora of inadequacies, contradictions, challenges, criticism, and gaps presented and discussed. Based on the identified theoretical and practical inadequacies presented below, can it be concluded that criticism exists and that there is an on-going discussion in the field on how to approach CM in the best feasible way. Furthermore, these inadequacies make up the relevance of this study, as it supplies fundamental arguments as to why it is relevant to study the gap between CM practice and research.

Major Challenges
Launching planned, large-scale, and strategic transformation initiatives are a common way for businesses to create and change core capabilities and thus enhance organizational competitiveness (Satell, 2019). While companies tend to understand the necessity of transformative efforts and its requirements (Bordeleau & Felden, 2019), they tend to struggle to successfully institutionalize major and planned change efforts, and thereby fail to fully realize a long-term business impact, notably when it comes to integrating and anchoring digital capabilities, services and solutions among both external and internal stakeholders (Bordeleau & Felden, 2019; Allen et al., 2007).

The ability to adapt to a changing environment and sustain changes have become a critical factor in the success of today’s organizations, and is equally crucial for long-term survival (de Biasi, 2018; Dobson, 2001). Therefore, mastering the challenge of organizational change has been recognized as one of the top management challenges for the 21st century (de Biasi, 2018), especially as most change initiatives backfire (Barron, 2017; Kotter & Schlesinger, 1979) or fails to reach the desired potential and results (Satell, 2019; Fuchs & Prouska, 2014; Dobson, 2001). Additionally, all too often change initiatives are short-lived as altered ways of working, structures, processes, or behaviors do not take root (Clausen & Kragh, 2015). Subsequently is a primary concern with CM namely the high failure rates of change efforts (Aviles & Dent, 2015).

Success and Fail Rates
There exists an abundance of literature describing the failure of change initiatives (Brown et al., 2016; Dahlgaard-Park, 2015). For instance, Gravenhorst et al. (1999) claim that 50 % of all the organizational change programs either fail, end in deadlock, or do not reach the goals, which they initially were aiming at.

Other estimates highlight success rates between 20 and 40 percent (Paul, 2015; Nasim & Sushil, 2011; Allen et al., 2007; Higgs & Rowland, 2005; Dobson, 2001). The low success rates of change initiatives justify that inadequacies exist in the CM domain (Clausen & Kragh, 2015). Therefore, CM is risky. The paradox is however that organizations have no other choice, but to engage in change initiatives to stay relevant and competitive (Heckmann et al., 2016). There is a wide agreement among researchers that organizations must continue to develop their CM capabilities for rapid adaptation, flexibility, and innovation (Meyer & Stensaker, 2006). Thus, is capabilities related to CM acknowledged as a critical skillset for twenty-first-century leaders and managers (Whelan-Berry & Somerville, 2010). Moreover, does Heckmann et al. (2016) points out that CM-related capabilities in practice and theory rest on unchallenged assumptions and inadequacies.

Theoretical Inadequacies
Change and the practice of managing it, is a controversially discussed subject that encompasses a diverse field of activities, approaches, factors, frameworks, models and practices, all intended to guide and instruct effective management of change (de Biasi, 2018). A negative consequence of the vast number of CM approaches currently available to academics and practitioners, is that they are often contradictory (Dievernich et al., 2016). The wide range of approaches and models are not only contradictory, but also confusing (Heckmann et al., 2016; de Biasi, 2018). Simultaneously do many researchers agree that fundamental issues exist. These refer to that there is a lack of consensus regarding generally accepted CM definitions and CM approaches (Heckmann et al., 2016; By, 2005; Higgs & Rowland, 2000). Along a similar line, does Al-Haddad (2014) claim that a considerable disagreement exists on the most suitable method, and the relevance and validity in the available change approaches.

By (2005) acknowledges an ever-growing and generic literature is emphasizing the importance of change, suggesting ways to approach it whilst limited empirical evidence has been provided in support of the different CM frameworks and models. Researchers have moreover different views on the way forward, as a few focuses on the leader's role, some take a more systematic and structured approach (Higgs & Rowland, 2000), while others emphasize slow and continuous changes, cultural change, individual and behavioral factors (Jayashree & Hussain, 2011). Despite the abundance of publications on CM and change models, is there still a need for determining critical factors that contribute to improving the success rates of organizational change initiatives (Errida et al., 2018). Although many researchers have suggested a plethora of methods to implement change, it has also become more recognized that one or even two frameworks or models cannot cover the vast amount of different change situations (Al-Haddad & Kotnour, 2015), as a one-size-fits-all approach to CM is not suitable for all situations (Al-Haddad, 2014). Along a similar line, Nasim and Sushil (2011) claim that it is imperative to explore alternative change frameworks and models.

Practical Inadequacies
Clausen and Kragh (2015) points out that the management of organizational change initiatives is both complex and ambiguous. The complexity of managing CM leads to shortcuts as managers try to reduce the core concepts into manageable agendas according to McCalman and Potter (2015). Also, Raineri (2011) claims that those who direct or take part in the change initiatives often overlook and possibly forget fundamental practices, which sometimes might seem as obvious CM and PM principles, resulting in inefficient practices and sometimes more chaotic process than necessary. The problem with CM failures might also have to do with that managers have neither the ability nor ability to implement change successfully, or that managing change (*in reality*) according to theory is difficult.

Along a similar line, does Stouten et al. (2018) claims that the fragmented literature on CM makes it difficult to both find and apply suitable CM activities, practices, and principles based on research. Instead, may CM practitioners rely on vague and ineffective recommendations from consultants or experts (Stouten et al., 2018). Yet another challenge CM practitioners are encountering refers to the difficulty of learning from lessons learned and past experience, and in such manner improve CM practices further, according to Stouten et al. (2018). Along a similar line, do leaders and managers oftentimes implement change initiatives without taking cognizance of organizational learnings from past projects and experiences (Makumbe, 2016), although this could allow organizations to potentially adjust and improve their CM capabilities (Heckmann et al., 2016). Consequently, researchers moreover agree on that making meaningful and sustainable change is difficult (Satell, 2019; Stouten et al., 2018; Higgs & Rowland, 2005),

Organizational change poses also risks for leaders, managers, and employees, because imminent changes may create resistance among risk-averse employees (Dievernich et al., 2016). Besides, resistance to change is often referred to as the main cause of CM failures (Fuchs & Prouska, 2014). Regardless of the reason for which change interventions fail, does Fuchs and Prouska (2014) claim that organizations need to manage CM as effectively as possible, as the lack of sustained change is costly for organizations (Clausen & Kragh, 2015). CM failures can also lead to a vast variety of negative consequences, such as inefficiencies in the change process, change fatigue, low adoption rates, but also unfavorable behaviors and reactions such as fear, confusion, anxiety and disbelief (Holten et al., 2017; Clausen & Kragh, 2015).

The Bottom Line
Consequently, can CM involve risky, haphazard, and revolve around improvised activities and processes that can result in unsatisfactory or unfavorable outcomes. Especially if managers take a one-size-fits-all approach to CM, according to Bruch et al. (2005) and Kotter and Schlesinger (1979). Bruch et al. (2005) states that practitioners and researchers should strive to achieve a balance between a contextual and a generic model (*but yet company-specific*), as most companies are in urgent and considerable want of systematic processes for managing strategic change initiatives. Meyer and Stensaker (2006) do moreover pinpoint the need of reviewing CM frameworks and models, as a means to develop reliable processes and procedures for diverse types of changes, in multiple organizational contexts. Conclusively, researchers and practitioners now call for further investigation on how CM practices can be improved throughout the entire CM lifecycle (Heckmann et al., 2016; Makumbe, 2016), whereas Raineri (2011) expresses the need for more empirical research to establish a better understanding of the inaccuracies in the CM domain, and thus bridge the gap between CM practice and theory.

3.4 Change Management Frameworks and Models

CM frameworks and models found in the CM literature are presented and discussed in this section. At first, are CM models discussed. Thereafter is a conceptual CM model proposed and explained. This conceptual CM model is furthermore based on a vast amount of CM activities and factors. The conceptual CM model is meant to be used as a frame of reference for effective comparison and analysis of both the empirical and theoretical findings and outcomes.

Theoretical Building Blocks: *Identified CM Models and Practices*

CM frameworks and models have been investigated in search of key activities and factors within the CM literature. The reason CM frameworks and models exclusively have been studied rests on the assumption that they are based on activities and factors, necessary for successful CM. This is furthermore in line with what some researchers are claiming, namely, that there is still a need for identifying, clarifying, and determining additional key activities and factors for improving the success rates of change initiatives.

In total have 50 CM frameworks and models been identified in the CM literature that fulfills any of the following characteristics: processual, descriptive, individual behaviors, group dynamics, and open-system. These change types are described earlier in this chapter. A comprehensive and detailed table of the frameworks and models has instead been incorporated into the appendix and is visualized in table 3. Table 3 covers all the 50 CM frameworks and models, and describes the type of model, core ideas, the key activities and factors alongside the sources of reference. As a complement, another table has been made, which includes a condensed version of the extensive change framework and framework (*table 3*). The condensed table is listed below in table 4**.**

Table 4 features all the identified CM frameworks and models, and aims to describe the frameworks and models from an overarching perspective before detailed descriptions of all the content (*activities and factors*) in the frameworks and models are outlined in the conceptual CM model (*in the last parts of this chapter*). This table shows the name of the CM frameworks and models as type or category. In table 4 are processual or descriptive models contrasted towards a school of thought category, which varies between individual behaviors, group dynamics, or open-system theory. The categorization of the identified models are made by analyzing underlying the purpose of the models, aim, core ideas, key activities and factors, and whether the models either follow a processual and steps-wise model, or if they are described as high-level and interrelated activities and factors. This type of categorization of the CM models allows for six different variations of classifications outcomes. These are individual-processual, individual-descriptive, group dynamic-processual, group dynamic-descriptive, open system-processual, and lastly open system-descriptive. Additionally. Table 4 is furthermore showing the quantity of each type of identified model and framework. A significant result is that processual models constitute 36 out of 50 models. Additionally, model types that fall in the category of group dynamics are more common (24), compared to individual behavioral (9) and open-system models (17). Another remarkable finding concerns that no model was found and considered to fit the characteristics of being a descriptive and group dynamic model. Conclusively, an initial research gap has been identified.

In accordance with what is discussed by many researchers, namely, that the CM discipline comprises a plethora of CM frameworks and models. This statement can now be confirmed and supported with the identified CM models (*listed above*). As discussed earlier, some researchers claim that it can be confusing for practitioners to navigate and use insights from the abundance of CM frameworks and models that exist. In this regard, does table 3, 4 and the conceptual CM model (*below*) contribute with a simplified overview of CM frameworks and models in the CM literature. Simultaneously have researchers also expressed that there is a need for further empirical research that can identify and clarify the gap between theory and practice.

Table 4. *Overview of the Identified CM Models in this Study*

Types & Categories	Processual Model	Descriptive Model	Quantity
Individual Behaviours	*Connor and Patterson's model. Kotter and Schlesinger's change strategy. Bridge's transition model. Kubler-Ross change curve. Appreciative Inquiry. Judson's model. Prochaska and DiClemente's model. Theory U.*	*Yukl et al.'s commitment model.*	9
Group Dynamics	*Lewin's model. Bullock & Batten's model. Kotter's model. Beckhard's model. Hayes model. ACMP's Standard. Kanter et al.'s Commandments. Galpin's wheel model. Hiatt's ADKAR model. Persuasion Campaign. Beer et al.'s model. Tipping point leadership process. Luecke's model. Change Activation Toolkit. Accelerating Implementation Methodology. Beckham & Harris Model. Change Acceleration Process. People-centered implementation. Harrington-Voehl's model. Lippitt's model. Cummings and Worley's model. Anderson and Anderson's model. HSE's model. Pendlebury et al.'s model.*	*Identified gap.*	24
Open-System	*Knoster's model. Armenakis & Harris Model. Burke & Litwins' model. Carnall's model.*	*Johnson's cultural web. Weisbord framework. Managing Successful programs framework. Senge et al.'s model. Nadler & Tushman's congruence model. Thurley & Wirdenius change strategies. McKinsey's 7S framework. Beer and Nohria's Theory O and E. Parson's model. DICE framework. Beckhard & Harris change formula.*	17
Quantity	36	14	50

Therefore, an attempt is made below (*see the conceptual CM model*) to clarify how CM-related practices can be understood better and explained in new ways. Thus, is it relevant to structure CM-related activities and factors in a systematic and pragmatic manner. This could consequently allow for alternative viewpoints and discussions on how CM practices and models can be adjusted and potentially developed. As part of this attempt, a practical, situational, and systemic model (*based on key CM activities and factors)* for planned change initiatives are presented and discussed in the next section.

This will be presented as a conceptual CM model that takes into consideration researchers' concerns (*listed in the theoretical inadequacies listed above*), simultaneously as a vast amount of key activities and factors from different types of CM frameworks and models are merged, taken into consideration and put into a sequential processual model consisting of several phases and supporting activities.

3.5 Conceptual Change Management Model

The conceptual CM model aims to support the management of planned change initiatives. The model is a result of combining and merging the identified key activities and factors, and builds upon certain phases and activities, as it is meant to be used as a frame of reference for comparing and analyzing the empirical and theoretical findings and outcomes of this study. Thus, can the conceptual CM model be used to discuss and theorize on how an organization's potential and ability to undertake change initiatives can be improved. The model has more precisely been built by organizing the key activities and factors (*listed in table 3, found in the appendix*) into main categories that are often discussed in the CM literature.

These categories have thereafter been organized into a processual model, covering aspects prior, during and post implementation. The conceptual CM model is furthermore organized into in the following six sequential phases, namely, 1: Diagnose, 2: Design, 3: Readiness, 4: Implement, 5: Anchor and 6: Sustain. In addition to these six sequential phases, this model also takes four parallel and continuous activities into consideration. These are: 1: Lead stakeholders, communicate and manage issues, 2: Monitor, feedback, review and adjust, 3: Rewards and recognition and 4: Training, education and learnings. It is also important to point out that phases and activities might overlap, throughout the change process. This implies that an activity or phase might be initiated, even though a prior activity or phase is still incomplete.

The choice of a sequential and processual CM model is simply based on the findings presented above, highlighting that the majority of the identified CM models are both sequential and processual in nature. Furthermore, the combination, structuring, and ordering of the phases and activities originate and are influenced by the actual order and sequence they are described and presented in the various CM frameworks and models. As there are plenty of activities and factors that have been described and taken into consideration, the sources and references have been presented beneath each section to simplify the reading and to make the text more intelligible. Additionally, are all the sources and references which the described phases and activities (below) presented in table 3 (*listed in the appendix*).

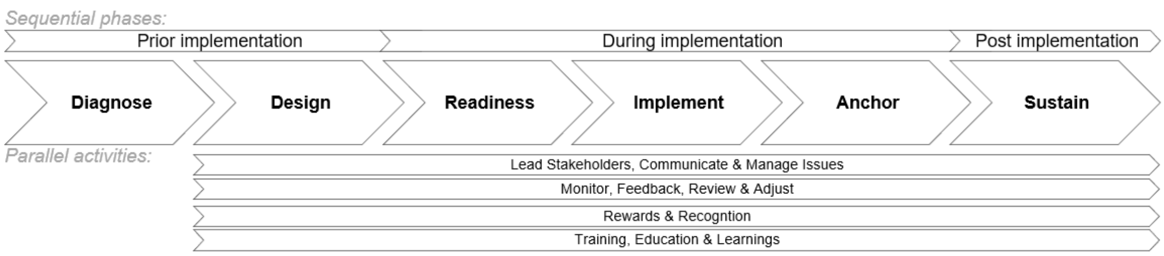

Figure 3. *Conceptual CM Model*

Description of the Conceptual CM model

Below is the proposed and conceptual CM model presented. Each phase and activity are hence described in further detail, as clarifications of key activities and factors derived from the 50 CM models are combined and merged into a systematic, practical, and conceptual CM model.

Sequential phases

Diagnose

The change process starts off by recognizing, assessing, and verifying both the internal and external need for change. A part of this assessment concerns estimating and investigating the change impact, use cases, possible outcomes, change readiness, maturity of key stakeholders and timing of the change. Additionally, is this phase characterized by setting up a business case for the change endeavor, and thus creating an understanding of the current state, especially regarding analyzing why the change must take place and what supports the change (*the story and case for change*). The formulation of a vision and desired state is a critical aspect.

Moreover, it is important to early on foster consensus of the new vision, assure competence to enact it and cohesion to advance it. Following activities address the development of a high-level plan with defined toll gates and milestones, in which the assessment of how the change initiative will affect culture, structure, system, staff and skills. Thenceforth, should emphasis be put on clarifying the role and expectations of the change team, leader and agents. The theory furthermore highlights the importance of training and keeping change leaders up to date with CM skills. Lastly, ensuring enough and necessary resources to realize the change is also considered to be of great importance.

Sources: Rosenbaum et al., 2018; Kraft et al., 2018; Cameron & Green, 2019; Brisson-Banks, 2010; Al-Haddad & Kotnour, 2015; Voehl & Harrington, 2017; Stouten et al., 2018

Design

The theoretical findings highlight the importance of prioritization and assigning resources to conduct a detailed pre-study. This is to be followed by crafting a comprehensive change plan consisting of how to officially end and separate from the past (*and past projects*). Theoretical findings also imply that the whole change plan should not be planned, instead the plan should be flexible, and be able to incorporate changes and adjustment. A stakeholder strategy furthermore needs to be crafted, one that identifies core, primary and secondary stakeholders, and whether key stakeholders are involved in other projects to understand their situation and analyze. The stakeholder strategy needs to emphasize activities that targets the question "*what's in it for me"* for any given group of stakeholders. In regard to the communications strategy, it is considered to be essential to put together a consistent and compelling change story consisting of what makes it worth undertaking and why, what's changing, why, when, by who and what's remaining the same.

Theory also pinpoints that one should plan for how to measure progress and decide when, how often, who will monitor and report status reports, and additionally define the requirements for activities and when they are fulfilled. When setting goals and targets, one should embrace the paradox between economic value and organizational capability, and plan for short term goals and wins.

Another critical area concerns the organizational culture. In this aspect, it is recommended to conduct a gap analysis of the current and future organizational culture, an assessment of how the change plan will affect the corporate culture, where to direct efforts and how to adjust the change process. Additionally, the work climate and cultural culture is suggested to be prepared before setting plans in action. Besides, the need for change must outweigh the potential and upcoming resistance. Therefore, one should analyze and plan how to handle resistance. Furthermore, is it considered to be important to estimate how much and what kind of resistance the change initiative may encounter and by whom, and to evaluate and learn about different methods for managing resistance. The involvement of HRM (*Human Resource Management*) practitioners in the change process is moreover considered to be key, when it comes to utilize insights to boost momentum, improve readiness activities and mitigate potential resistance.

Sources: By, 2005; Al-Haddad & Kotnour, 2015; Voehl & Harrington, 2017; Löthman, 2017; Sætren & Laumann, 2017; Cameron & Green, 2019; Alhashimi, 2015; Sætren & Laumann, 2017

Readiness

This phase is initiated by unfreezing the current state of the organization and its stakeholders, by letting go of the past and marking a clear ending. This is followed by increasing the anxiety about doing nothing, the felt need for change and making key stakeholders experience the organization's problems. The purpose should be to create a sense of urgency and importance of the need to change. Other activities concern collecting ideas, exploring insights and going live on communicating the vision. It is further important to frame the change as a positive opportunity or endeavor, by creating enthusiasm and providing guiding images of the future that will engage a creative imagination of those affected, so that they can already understand and have a sense of the positive situation after the change, followed by actions that draw people’s attention to how new ways of doing things will make a difference. When concerned stakeholders are aware, it's considered to be time to establish a deeper understanding of the change.

The theoretical findings imply that one should prepare stakeholders for what is coming and present a structured and systemic change plan. This plan should consist of a detailed plan explaining the external and internal threats and weaknesses, the purpose, expected business outcomes, the scope and scale of the change, a clarification of practicalities and the next steps required to implement the change, explanations on how and when stakeholders will be affected, assessment and clarifications of expectations of stakeholders throughout the change process. In addition, the theoretical findings suggest that one should find ways to use and leverage corporate culture to benefit change. When plans are set into action, the theory advocates the initiation of activities focusing on gathering insights and feedback through dialogue and involvement of stakeholders.

The theory also proposes the importance of joint diagnosis of problems and based on this develop a collective image of organizational problems and shared goals for how to overcome the problems. These aspects are expressed to contribute enhancing commitment of stakeholders. Additionally, is the participation of change recipients important in the change process, especially when it comes to providing them with opportunities for involvement. One should furthermore capitalize on creative thinking and acting that emerges during this phase. Another important success factor concerns the monitoring and evaluation of the change recipient’s awareness, understanding and acceptance for the change, and whether the change message is getting through.

Sources: Vanqa, 2006; Hayes, 2018; ACMP, 2014; Rosenbaum et al., 2018; Kotter & Schlesinger, 1979; Alas, 2004; Sætren & Laumann, 2017

Implement

The implement phase is characterized by execution and implementation of activities. As the theoretical findings imply, it is important to utilize leaders and change agents at every level of the organization, e.g. on the local levels who can foster strong ties to employees and act as role models for them. Equally important pinpoints the use of insights and input from end-users in the change process.

Also, to implement the change in distinct steps and in small departments (*e.g. using pilot projects*). This is to be followed by using early wins, gaining early adopters and then a transfer of best practices and knowledge gained to a broader rollout. In this process, one should make sure that early successes are visible to all stakeholders. Moreover, strive for and communicate both quantitative and qualitative results and benefits (*e.g. both business results, but also in behavioral changes*). It is also critical to empower stakeholders to act on the vision, as this helps employees to maximize their contribution to the change process, whilst encouraging innovative thinking and challenging people to question assumptions about the work and better ways of doing things. The theoretical findings recognize the importance of ensuring that people have enough resources and time to work with changes. Additionally, leaders should make people feel cared for and consult with people before making decisions that affect them, while keeping people focused on the execution plans and the challenging work ahead.

Other critical aspects concern the exploration, monitoring and mitigation of reactions, behaviors and emotions that individuals might experience during the change process. Many researchers emphasize the significance of not confusing concerns that people raise about the content of the change, with personal and individual concerns. It is also suggested to use individual and psychological CM models to gain insights in appropriate change interventions on a trial-and-error basis to enable groups and individuals to move from a less acceptable to a more acceptable set of behaviors.

The imperative is to monitor and minimize the likelihood of unfavorable employee reactions to change interventions. Patience needed among top managers and change leaders, as the implement phase is more protracted for employees further down the hierarchy. Top management and leaders are likely to be the ones that have emotionally stepped into a new beginning and future phase, while people and change recipients may appear to lag behind. The theoretical findings also address the importance of investigating whether the receiving organization is ready and able to handle the proposed change and how the change will be integrated and aligned with other areas in the organization. Lastly, attention should be given to prepare the receiving organization further and take action to anchor changes.

Sources: By, 2005; Al-Haddad & Kotnour, 2015; Stouten et al., 2018; Alas, 2004; Voehl & Harrington, 2017; Stouten et al., 2018; Rosenbaum et al., 2018;

Anchor

The theoretical findings pinpoint the importance of evoking a burning platform strategy, as a means to remind people of the urgency and make it easy for people to adapt to the change and thereby make it impossible for people to do things any other way. Emphasize should also be given to broaden and mobilize support for change. Reinforcement of desired behaviors are furthermore suggested by ensemble and utilizing change agents and ambassadors to support change. Other aspects that should be taken into consideration are that long-term change efforts can slow down and decrease the overall momentum. Therefore, is it recommended that one should start small, spread and diffuse the change with incremental deliveries and partial solutions. Focus on ensuring that employees can cope with the added effort to adopt new ways of working and remove nonessential regular work from employees with key roles. Refine change plan if necessary and be on the lookout for strategies that are not having the desired effect or initial planning assumptions and prerequisites that are no longer valid. Monitor and evaluate commitment of stakeholders and take actions accordingly and lastly, make sure the change will have a smooth transition into operation by evaluating whether it 'fits' the culture and environment into which it is being introduced.

Sources: By, 2005; Cheung et al., 2010; Al-Haddad & Kotnour, 2015; Stouten et al., 2018; Alas, 2004; Voehl & Harrington, 2017; Stouten et al., 2018; Rosenbaum et al., 2018; Handscombe, 2003

Sustain

The theoretical findings imply that one should not enact changes too early and likewise do not declare victory too easy. In this phase other crucial aspects concerns that one should address, change and ensure that structures, systems, policies, processes, rewards, training, development and job roles have an organizational alignment that fits the new state, if not adjust. Utilize past progress to convince and strengthen cultural and behavioral changes and reconfigure organizational incompatibilities and build congruence if necessary.

Sources: Garvin & Roberto, 2005; Beer et al., 1993; Al-Haddad & Kotnour, 2015; Stouten et al., 2018; Pellegrinelli et al., 2007; Dolan, 2010; Hamid et al., 2011; Nair & Vohra, 2011

Parallel activities

Lead stakeholders, communicate and manage issues

Critical to success is the support and counseling through formal and informal activities. Theory implies that stakeholders appreciate these activities. Additionally, efforts aiming to increase the motivation and commitment of change recipients, should emphasize and trigger increased autonomy, mastery and purpose. Involving people at an early stage can also help to win over their hearts and minds. Furthermore, it is suggested that commitment and endorsement to change should be demonstrated clearly by leaders, as their efforts can influence stakeholders' felt need and willingness for change. Theory also highlights that measures should be taken to ensure that the next generation managers continue to support the change, and that influential management involved in driving the change should be kept in the change team and rewarded accordingly. Update the stakeholder, communications and risk plan continuously. Regularly communicate the underlying issues and pressures that triggered the change initiative. Continuously communicate a compelling purpose behind the change, a picture of how this new organization will look and feel, a step by step plan to get there and how employees will play a part in the outcome.

Utilize different channels and adapt frequency of communication accordingly. Don't underestimate one-on-one dialogues conversations to win stakeholders over. Repeat information about what is changing as it will take time to sink in. Use catch phrases and storytelling to communicate the change. Ensure that all messages about the change are consistent and clear. Dispel rumors quickly. Publicly praise desired behaviors and criticize disruptive, divisive behaviors, to reinforce desired habits. Spread positive stories from the pilots and the concerned stakeholder's group. If change is critical to the company's survival, top executives and leaders must take part and communicate the message.

Sources: Luecke, 2003; By, 2005; Cheung et al., 2010; Al-Haddad & Kotnour, 2015; Kim & Mauborgne, 2003; Voehl & Harrington, 2017; Beer & Nohria, 2000; Hudescu & Ilies, 2011

Monitor, feedback, review and adjustments
This phase is characterized by a continuous cycle of monitoring, reviewing can minimize problems and helps to keep the change on track, while differentiating between project, change and business outcomes. For instance, measuring a change initiative only using technical dimension is a classic mistake and likewise, measuring the outcome of a change initiative immediately after it is completed is another common mistake. When it comes to KPIs and metrics, traditional ways of measuring success do not always apply and may end up giving a skewed view of progress. Therefore, seeking it is suggested to new or alternative ways to showcase positive results by e.g. focusing on visualization of performance and results in effective ways. Furthermore, the theory advocates that both internal and external experts should review the change process. Additionally, assess the commitment and capability for change regularly, especially aspects concerning the project length or duration, integrity, commitment and effort, as it is important to know when e.g. commitment is waning so that actions can be taken to address it. Research also mentions that one should be aware of situations where momentum is lacking, relaunch with new focus, themes and goals. Other crucial aspects highlight the planning and initiation of positive, reinforcing and self-driving mechanism loops and prevent negative ones.

Source: Bushe, 1995; Ludema et al., 2006; Stouten et al., 2018; Harrington, 2017; Hayes, 2018; Cameron & Green, 2019; Ford et al., 2014; Yukl et al., 2002; Conner & Patterson, 1982

Rewards and recognitions
Conduct reward programs and reward people who have made active contributions to the achievements. Reward people publicly. Use incentives to reinforce changes and reprimands to reduce unfavored behaviors. Celebrate achievements and share success stories.

Sources: Alas, 2004; Sætren & Laumann, 2017; Sirkin et al., 2005; Susman et al., 2006; Di Pofi, 2002; Spangenberg & Theron, 2013; Sohmen, 2016

Training, education and learnings
Conduct training programs whilst allowing for individual learnings. The development of employees' knowledge and ability should intend to support the change. However, do not assume that with knowledge comes ability, as the knowledge gained must be put into practice. Collect, gather and spread the learnings and benefits of the change process.

Sources: Voehl & Harrington, 2017; Vanqa, 2016; Anderson & Anderson, 2001; Stace, 2017; Rosenbaum et al., 2018; Cameron & Green, 2019; Brisson-Banks, 2010; Kritsonis, 2005; Kritsonis, 2005; Vanqa, 2006; Al-Haddad & Kotnour, 2015

4. Case Study

In this chapter, the case study will be introduced in further detail. The case study is based solely on a singular company. This company henceforth will be referred to as the case company. Additionally, this chapter serves as means to introduce the company, its corporate culture, current situation and challenges related to CM practices.

4.1 Case Company

The case company can be defined as a large enterprise that is active in the telecommunications and ICT industry, specialized in equipment, technology solutions and services for networks and mobile communications, and aims at empowering an intelligent, sustainable and connected world by enabling connectivity for service providers and telecom operators. The case company is furthermore customer-centric, follows a mixture of a centralized and matrix-like organizational structure, has a global presence and is conducting business in over 100 countries with roughly 100.000 employees worldwide.

4.2 Corporate Culture

The overall corporate culture is characterized by consensus culture and its core values have historically revolved around respect, professionalism and perseverance. The company strives to be a responsible and relevant driver of positive change. These aspects make up cornerstones of how organizational change, strategy execution and corporate culture are approached. The company continuously works to improve and orchestrate business practices revolving around customer experience and operational efficiencies, whilst focusing on building and enhancing trust, transparency and integrity.

The corporate culture is built on over a century of continuous innovations and courageous decisions, in a place where co-creation and collaboration are considered embedded into the corporate culture. Additionally, leaders and managers have remained at the company for a long time, as many have had remarkably extended periods of employment. The corporate culture can be interpreted as the driving force behind business performance, as leaders, managers and employees are vital to deliver on their focused strategy, whilst fulfilling customer promises and progressively developing core aspects of the business. In recent years, further developments in the corporate culture has resulted in a focused corporate culture strategy which can be summarized in the following five focus areas:

- *Increase willingness to make fact-based and courageous decisions.*
- *Foster empathy for different perspectives, approaches, and overall humanness.*
- *Improve cross-company cooperation and collaboration.*
- *Enhance willingness, ability, and opportunity to execute speedily.*
- *Reinforce willingness and ability to create a speak-up environment*

4.3 Current situation

The case company has a strong project culture with well-established processes to launch and manage projects to evoke changes. PM is moreover performed globally on all levels within the company and is of strategic importance to the development of the company's internal and external business processes. The project culture is characterized by a fast-paced and action-oriented work climate. Most of the projects falls into following categories; R&D projects, cultural and HRM-related projects, customer projects, product and service development, continuous improvements or operational developments, while a few are considered to be strategic, large-scale and transformational.

The company has historically been successful in managing planned, large-scale, top-down, cross-functional and strategic projects, despite that minor components and parts of launched projects have not always met all the expectations and intentions. As discussed in the next chapter concerning lessons learned, this can exemplified in unfavorable adoption rates among end-users or stakeholders, deficiencies related to transparency, participation and cooperation, unsatisfactory sign-offs, agreement and commitment with all stakeholders and lastly, inadequate follow-ups of end results, according to respondents in this particular case study. Furthermore, to maintain a relative high level of anonymity and confidentiality, this study will not discuss, analyze or make any further claims of whether the studied projects related to lessons learned ultimately were successful or not, what lesson learned derives from what project, nor what respondent said what.

The company is currently on a strategic transformation journey with a program that consists of a collection of projects, aiming to engage and empower the best of company to every customer and to industrialize and scale new capabilities. The focus of this program is subsequently to automate and digitize all aspects of end-to-end business processes, in which cross-functional projects and teams have been set up. In contrast to e.g. continuous improvement or customer deployment projects, these strategic projects are planned, strategic, cross-functional, top-down driven, affecting both internal and external business operations and stakeholders. Additionally, these projects follow an agile project methodology when it comes to e.g. develop and deploy new products, services, tools, solutions, ways of working or organizational capabilities.

In line with the problem statement, research purpose and questions, is it now interesting to investigate and understand why the previous projects in this case study, have not reached the desired outcomes nor full potential, and whether lessons learned from past projects have been taken into consideration (*into new projects*). Thus, will identified lessons learned and currently applied CM strategy be presented, discussed and analyzed next, as means to develop in-depth understanding of what CM-related activities and factors can contribute to bridge the gap between practice and research and how CM practices can be adjusted and potentially improved.

5. Empirical Findings

This chapter will present the empirical findings from the case study at the case company. Furthermore, are both the identified lessons learned and current CM strategy summarized in this chapter. The empirical findings from the semi-structured interviews and internal document studies are mixed together and therefore presented in a continuous, concise and interlinked manner, as means to facilitate an intelligible and coherent reading (text). Additional reasons for presenting the findings in such a way refers to anonymity and confidentiality features. At first, the lessons learned will be presented in accordance with the conceptual CM model (introduced in the theory chapter). Thereafter will the current CM model and strategy at the case company be presented.

5.1 Lessons Learned

In the section below will the lessons learned be presented. Initially, will the practical research approach and assumptions be described. Thereafter will the actual results and findings be presented in detail and will cover both sequential key phases and parallel activities.

5.1.1 Practical Research Approach

The following section addresses lessons learned and experiences from previously conducted projects. Lessons learned have been addressed due two main reasons (*or assumptions*). Firstly, by not learning from project successes and failures, an organization might be doomed to repeat similar mistakes, and secondly that it is positive for individuals, groups and an organization to reflect upon, distill and review learnings, best practices and insights, which can then be taken into account and applied to current or future projects.

Furthermore, four projects have been studied (*as means to identify lessons learned*, which fall in the category of being planned cross-functional, strategic and top-down managed projects. To identify, analyze and retrieve knowledge and recommendations, 25 interviews have been carried out with a various set of managers and leaders that have been involved in these past projects. Also, has a qualitative and semi-structured approach been applied in all interviews, meaning that a series of predetermined, but open-ended themes, topics and questions have been asked or discussed. These have focused on e.g. positive aspects, successes, unexpected outcomes, improvements areas, pain points, recommendations, applied CM method, stakeholder and communications management. The interview process has furthermore followed a cycle of planning, actual interviewing, coding, analysis, and lastly the categorization and interpretation of results have been structured in accordance to the suggested conceptual CM model, as means to make the interview notes and scripts intelligible, render in useful research insights, as well as to enhance research credibility. Regarding research ethics (*anonymity and confidentiality*), will no names of the interviewees be stated or discussed. The same applies for the studied projects, which the lessons learned below are based on, as no further explanation, titles, success rates, actual content nor specifications will be presented or discussed.

The main findings related to CM practices will nonetheless be combined, presented and discussed from an objective viewpoint, below. These concerns e.g. learnings based on challenges, problems, positive aspects and strengths, things that have gone well, as well as general recommendations based on experience and competence.

5.1.2 Actual Results

Sequential Phases

Diagnose

The empirical findings indicate that the formulation of project specifications could be better in terms of details and clarity. Several interviewees have also pinpointed that misunderstandings between leaders and sponsors has occurred when it comes to details in project specifications. One third of the interviewees have claimed that a front-end loading approach would be beneficial to use to the change method. Whereas about two thirds of the interviewees have highlighted the importance of allocating dedicated resources to CM. Additionally, have the validation and assurance that the change initiative can create true business value considered to be problematic in past projects. Therefore, may have recommended to emphasize thorough and early assessment of market conditions, customer readiness and their digital maturity. Interviewees have also said that letting experienced and senior change leaders take part in change initiatives and providing these with further training and skills are key success factors.

Design

Based on experiences and lessons learned from past projects, many of the interviewees have stated the importance of having an end-to-end and systemic approach, and furthermore that the use of lengthy change initiatives and large scopes should be avoided if possible. About two thirds of the interviewees have also pointed out the importance of incorporating elements of an agile method and agility into the CM process. All of the interviewees in the study have also declared that historically there has been a tendency to plan and manage parts of change initiatives as “isolated events” or in “organizational silos”.

Along a similar line, they have also suggested the importance of enhancing cross-functional and collaborative approach. The formulation of a unified ambition and vision to influence, motivate and affect stakeholders on diverse levels of the organization has also been recommended, in which setting clear goals has been emphasized. The empirical findings also indicate the importance of involving the line organization in the change process. Moreover, it is suggested that the change approach should be adapted to the context (e.g. *market areas or customer units*) the change is being implemented in. Consequently, pre-study or planning assumptions or other prerequisites might vary and therefore the change plan needs to be adjusted. It is also discussed by many that a prioritization list should be made, where to direct efforts and anchor the change first, by looking for change recipients or customers that might be positive to and willing to change.

Many interviewees have also claimed the importance of starting the planning of how the handover will be conducted. Regarding stakeholder management, about half of the interviewees have stated the potential impact of informal leaders should be identified as means to mobilize a positive momentum around the change endeavor. Subsequently, a plan should be made for how to get these involved and onboard in the change process. Many have also pinpointed the significance of assessing and preparing to answer the WIIFM-question for diverse groups of stakeholders. In regards to stakeholder management, about a third of the interviewees has recommended that one should plan detailed activities for how to gain acceptance of stakeholders, and furthermore that one should plan how to get in agreement and sign-offs with key stakeholders or change recipients (*e.g. line organizations, end-user, or customer*).

Readiness
The empirical findings highlight that a minor part of the interviewees has discussed and recommended the use and provocation of crises as means to mobilize credibility and change readiness. Common factors discussed by many concerns a clear-cut communication of the vision, aiming at reaching a collective awareness and understanding of change initiative. Others have highlighted the importance of collecting feedback and making sure underlying and actual problems are addressed, as means to gain a powerful and genuine motivation and attention of stakeholders.

Many have recognized the communication of whatever's being developed (*e.g. solution, use cases or benefits*) should be communicated out continuously, whilst the reactions and feedback of stakeholders should be taken into consideration (*e.g. if they are ready for the changes early on*). A couple of the interviewees pinpointed the importance of identifying countries, markets and business units in which changes might take longer to implement, so as to initiate communications and CM related activities earlier (*to save time or speed up the change process)*.

Implement
In the midst of the change process, during the actual implementation and development of the new solution, tool, or new way of working, a majority of the interviewees have claimed that it is important to enhance and promote transparency, openness and collaboration. About half of the interviewees have also stated that the needs, demands, benefits, use cases and maturity of the receiving organization or end-user could have been reviewed continuously throughout the project, as e.g. requirements can change. This would according to the interviewees ensure an increased adoption. Based on previous projects, other recommendations refer to reaching agreement and sign-off with key stakeholders and receivers of a change initiative is important and tell the ones affected by the change the actual reality of the project.

Furthermore, an increased emphasis should be put on gathering and incorporating insights and feedback from line organizations, as they are intended to be handed over the project later. Lastly, most of the interviewees have also underlined the importance of letting the top management and leaders participate in driving the change forward (*e.g. by showing interest, attention and commitment*).

Anchor
The empirical findings highlight that many of the interviewees have experienced that past projects have had too large scope and simultaneously been too lengthy. Consequently, many recommendations addressed the importance of reaching small and quick-wins (*e.g. to ensure buy-in, gain trust and belief in change*). Other general recommendations concern the significance of listening to non-compliant voices and resistance for constructive feedback and insights and offer affected stakeholders support (*and if possible, involve these*). Another commonly discussed aspect targets the allocation of resources and time to people, so that they can work with changes (*e.g. adoption of new solutions or ways of working*) on full time and not as something on top of one's already existing responsibilities. A few have also claimed that the allocation of resources should be targeted on three levels, namely, centrally, regionally and locally.

Sustain

In regards to sustaining and institutionalizing the change, about a third of the interviewees have claimed that more attention should be given to sharing and spreading knowledge, results, benefits and success stories, while others also pinpoints the importance of communicating and spreading unexpected yet positive outcomes. Moreover, to gather and transfer positive aspects of the entire change process to the line organization, to mark a clear ending of the change initiative and to celebrate possible successes are considered to be other success factors.

Parallel Activities

Lead Stakeholders, Communicate and Manage Issues

Based on past successes, many of the interviewees have said that a commitment, competent and well-functioning team must be assembled, as this is considered to be critical for achieving success. Furthermore, a few interviewees have also claimed it would trigger a positive momentum if the top management, leaders and sponsor would lead by example and participate actively in the change process. Informal leaders could additionally be leveraged throughout the change process to spread message, awareness, understanding, acceptance and commitment.

Another lesson learned concerns the delegation of power and responsibilities to local change agents, champions and ambassadors, as this is considered to be important to gain support of stakeholders in an efficient manner. If tasks and responsibilities are delegated, then this should also be follow-up on frequently (*e.g. as it's still the responsibility of the change lead to make sure things are done*). In addition, all interviewees have discussed stakeholder management. A significant finding has been that many have recommended to continuously monitor all stakeholders, as the influence and interest of stakeholders can vary through the change process. A perceived safe work environment has also been considered to be important and something to strive for in change projects (*e.g. try to make people feel safe and comfortable with the change*). This falls in line with what a few interviewees have discussed, namely that it is important for leaders to encourage people to speak up, and that this should not be seen as e.g. a threat but rather as crucial insights or constructive critique, that might be important for the future progress of the change initiative.

One third of the interviewees have urged that past projects have lost momentum whenever key managers and leaders have left their position in driving the change initiative, as new managers or drivers could have had new or other ideas or ways of doing things (*which e.g. could cause increased ambiguity or disarming previously establish consensus*). Moreover, if leading managers or key stakeholders are changed or quit, then it's important to pick new leaders carefully (*their motivation, focus, competence, priorities must be aligned with and support the change strategy and vision*), get the new ones onboard quickly while providing them additional support if necessary according to a few interviewees.

In regard to communications, many interviewees have highlighted the importance of vary and adapt the communication channels and the frequency of communications to each stakeholder group. Consistency of information is important to think of, as well as to avoid and dispel misinformation and rumors. The use of standardized newsletter and visual presentation of progress and results (*on various levels: strategic, tactical and operational*) are examples of effective and appreciated communication activities in past projects. This also applies for communication on how prioritization of changes will occur (e.g. *where are things being implemented now and what market areas, units or countries in the queue for change*).

Lessons learned also cover rebranding as a technique, especially if a change endeavor might encounter unfavorable reputation or if parts of the change might be viewed as a failure, in such case, a rebranding technique (*concern* a *relaunch with new name, focus, themes and goals*) could distance the change initiative from negative connotations or unfavorable events of the past. A few interviewees could discuss this to increase momentum again. Lastly, another key success factor recommended by many, concerns that KPIs and metrics should be agreed on and handshake(d) with key stakeholders.

Monitor, Feedback, Review & Adjust

A lesson learned from past projects, concerns the importance of tracking and monitoring the attention, commitment and support of the top management and leaders, and take action accordingly when these aspects decrease or diminish. Many interviewees have also pinpointed the value of enhancing transparency in sharing results and progress (*e.g. what is done, upcoming work, responsible ones, challenges etc.*).

Many of the interviewees have also discussed challenges in past projects, about formulating impactful goals and targets. Along a similar line, many have recommended that high-level or overarching goals should be aligned and broken down into shorter, smaller, visualized and operational metrics. Additionally, KPIs and metrics should be made extremely easy to follow and visualized as means to make it easy intelligible for various stakeholders in the organization.

A significant finding, advocated by a smaller proportion of the interviewees claims it would be beneficial if an external and impartial jury should be invited to review the change process between major toll gates or milestones as means to discover strengths, weaknesses, opportunities and threats, as a quality assurance. Lastly, a few interviewees have also suggested that the KPIs and metrics should be reviewed and reformulated so that they also cover non-traditional (*in contrast traditional metrics often focus on e.g. monetary, savings or cost related KPIs*). Instead KPIs and metrics are suggested to also cover aspects such as e.g. creativity, job involvement, job satisfaction, acceptance, commitment, adoption rate (*as these are perceived to be more fun, which in turn could create better acceptance and commitment*).

Rewards and Recognition

About a third of the interviewees have suggested that structures and systems need to be set up, especially when it comes to reward and recognize efforts and achievements, while a few have claimed that success stories, achievements and rewards should be published both publicly and globally. Additionally, some have discussed that rewards or incentives systems should be reviewed, to such extent that they promote managers to address underlying complex and critical issues that need to be handled in order to ensure the success of the project (whilst *avoiding too narrow focus on simply low-hanging fruits*).

Training, Education and Learnings

Common to the majority of the interviewees, is that they emphasize the importance of training and education of new tasks, especially for end-users, customers and the receiving organization. Moreover, a few have also discussed challenges with institutionalizing the change efforts, especially when it comes to document and share organizational learnings and experience, and furthermore make these organizational learnings easily accessible (so that e.g. *recurring organizational problems and challenges can be avoided*).

5.2 Current Change Management Strategy

*In the following section will an identified CM strategy that is currently applied at the case company, in the context of a program (collection of projects) be described and explained in further detail. Additionally, will this CM strategy, which consists of six phases be summarized and visualized in figure **3**.*

5.2.1 General Description of the Current CM Strategy

The current business transformation program is composed of several projects, based on both external and internal needs and demands (*e.g. new digital capabilities, tools, solutions, services, tools and ways of working*). In an endeavor to create favorable conditions to succeed with these projects, a processual CM model has been composed by the case company (*depicted in figure 3*). Similar to the lessons learned section, and due to research ethics, no further detailed explanation or detailed description will be presented or discussed regarding these projects. Instead emphasis will be on presenting, explaining and analyzing the general and focal CM model (*general activities and aspects in this model*) that the case company has developed and applied (*or planned to apply*) to the projects in the transformation program.

The purpose of the CM model is to provide the organization with a unified, structured and commonly accepted approach to CM, that supports the case company's capabilities and resources to secure impact, adoption and to ultimately reach the desired goals. Significant for this transformation program and the associated projects, is also that the vision and business rationales are clearly described in the format of why, what and how (*as it is based on a strong case for change*). To enhance favorable outcomes of the transformational program, has a considerable attention been given to CM practices. This is reflected in this aforementioned CM model.

Furthermore, is this CM model intended to be applied to all the strategic and cross-functional projects in the program. The projects will in this way have their point of departure in this CM model, whilst adaptations and adjustments are made when and if necessary, in accordance to specific and local project characteristics and technicalities. Accordingly, is the company applying situational methods in the strive to reach an optimum change approaches in the dozens of projects in the transformation program.

This model consists of six sequential phases and nine supporting enablers for how to make the change happen. The six phases are: Decide/Define, Prototype, MVP, Release, Adopt/Scale and Sustain/Evolve. Each phase will additionally be divided into several sprints in which project activities will be carried out in several iterations in line with the use of agile methodologies. The nine supporting enablers and activities are distributed and performed in parallel to the six phases. This CM model is visualized in the figure 3 below.

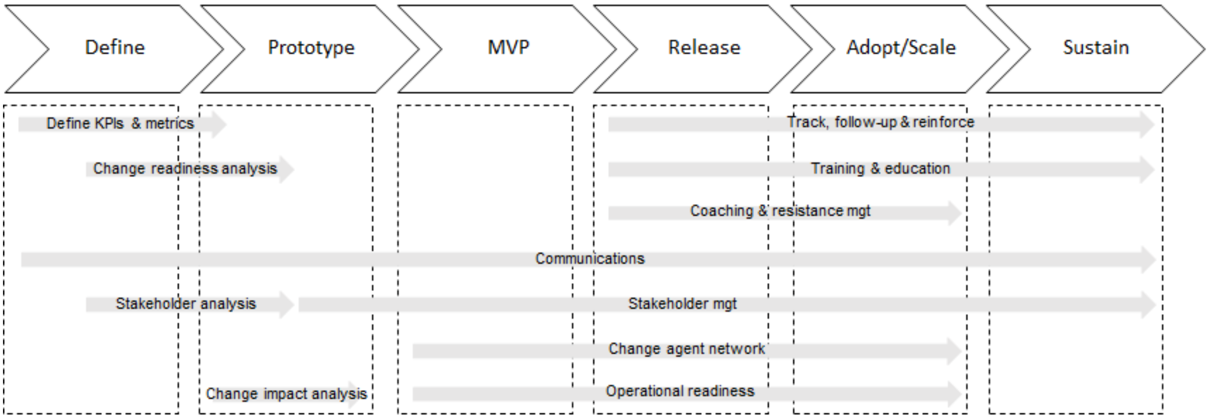

Figure 4. A *Currently Applied CM Strategy at the Case Company*

The basis of the business transformation program derives from both external and internal changes and can be categorized as a large-scale and transformative organizational change, as it implies changes in organizational structure, business operations, technology and how people are organized. In a response to prevent unfavorable outcomes and results, the company has taken measures in the creation of this general CM model and strategy which focuses on developing and applying CM capabilities. Furthermore, does this CM model aim at engaging various stakeholders, and in such way that enables to shift the change curve to secure adoption of new solutions, ways of working, facilitate a raise productivity, organizational effectiveness and realize the desired outcomes faster with mixed set of CM related enablers, activities and guidelines.

5.2.2 CM Strategy In-depth

Phase 1: Decide/Define

The change process begins with pre-study and analysis activities that focuses on assessments of prerequisites, data collection and validation. In this phase, a future state is defined with consideration to end-to-end flows, both from a customer journey and operational efficiency perspective. The CM strategy is to be clearly defined in terms of why (*the case for change*), what (*is to be developed*) and how (*to drive adoption)*. To bridge the gap between the current and future state, capabilities and competences (*the what*) are prioritized and chosen. These revolve around focused and contextual improvement areas that are in line with the business strategy and the project characteristics.

Additionally, is the internal communications department involved in this phase to support the development specific CM-related communications. Specific activities that will be carried out concerns setting up and forming a team, the creation of a vision and story of the future state, a draft of dependencies and technology architecture, assessment of adoption and deployment challenges and prioritization of resources. The project team is further intended to e.g. consist of dozens of employees from different line organizations. Change leadership is furthermore facilitated with activities revolving around developing, engaging, and equipping leaders with competence and resources to drive the change.

Phase 2: Prototype

The second phase in the change process can be described as an official kick-off, focusing on preparing involved stakeholders for the change, to get a common understanding of the current ways of working and making the key stakeholders see and feel the need for change.. This step includes a deep analysis of business processes, further investigating and clarification of requirements, a formal deployment sign-off and development of a deployment plan. A buy-in and sign-off from key stakeholders is also considered to be a key deliverable in this phase.

During this phase, plans, early deliverables, solutions and blueprints are prepared, put into action and prototyped, focusing on several aspects such as processes, ways of working, solutions or tools. End-user feedback is then collected, analyzed and prepared for the next phase (*MVP).* The preparation of MVPs revolves around a roadmap that targets pain points, features, dependencies, KPIs and targets, stakeholder management, deployment and adoption activities are analyzed and defined. The KPIs and metrics are then clearly defined with measurable KPIs, metrics, decision points and milestones.

Phase 3: MVP

From a holistic perspective, the MVP phase addresses activities concerning building, customization, testing and validating minimum viable products and solutions with the support of targeted workflows of cross-functional teams. As shown in figure 3, the communications and stakeholder management are set to continuously be managed even throughout this phase. Apart from these factors, two other enablers are initiated in this phase, namely, change agent networking and operational readiness activities. The change agent network activities that are initiated during this phase runs through to the Adopt/Scale phase, and focuses on scaling up, spreading and expanding the change. This enabler further emphasizes the importance of local change agents and champions to train and coach stakeholders, establish awareness and understanding of change.

The acceptance, commitment and adoption are furthermore addressed, evaluated and intended to be outlined in a roll-out and deployment model. This deployment model overlaps with the operational readiness activities and similarity to the change agent activities, stretches all the way to the Adopt/Scale phase. These enabling activities focus on assessing, preparing, refining and updating processes and systems, organizational structures, performance management, roles, responsibilities and decision-making processes. Resources and funding are furthermore continuously reviewed. Additionally, beyond what is prioritized, continuous improvement and local/bottom-up innovation are to be continued and is encouraged.

Phase 4: Release

This phase revolves around internal deployment, further demonstration, training, testing, validation and feedback by internal teams and stakeholders. As illustrated in figure 3, this phase includes seven parallel activities. Communications, stakeholder's management, change agent network, and operational readiness activities will continue to be prioritized. From this phase onwards, tracking and follow-up of KPIs/progress, training/education and coaching/resistance management activities will be initiated and are intended to proceed until and through the Sustain phase. In this phase the MVP will be further evaluated, improved, expanded and deployed.

A targeted handover plan is then prioritized and clearly defined, including aspects and activities revolving around integration, scalability, end-user adoption and deployment by line organizations. Other intentions of this phase concern the initiation of discussions and co-created plans regarding suitable adoption levers, with the aim to develop a change agenda for the remaining parts of the change process. From this phase and onwards, are communications and feedback-related activities initiated. These focus particularly on measuring and mapping employee and customer journeys, pain points, satisfaction, experience, dialoged, and feedback.

Regarding tracking, follow-up & reinforcement, these enablers address activities that are meant to reinforce the change, mainly by follow-ups, reviews, and actions that promote adoption and usage. KPIs and metrics that were previously broken down in different layers or levels in the organization (*in the Define phase*), are now monitored, and followed-up on. It is furthermore considered to be critical that objectives and results are focusing on business and customer requirements, business and customer feedback, customer impact, as a means to prioritize and validate activities and results. The results and progress are furthermore meant to be complemented and triangulated with HRM, business performance, financial data and end-user impact.

Training & education is similarity to tracking and follow-up activities, intended to go on until the final Sustain. This enabler focuses on educating and adapting training to customers and internal user's needs. These activities furthermore aim to enact autonomy, mastery and purpose among the stakeholders to realize secure commitment. The stakeholders need to know how to change, have the ability to change, participate, and get involved in the change process (*e.g. in the solution that is being developed and implemented*). Training programs are intended to improve the knowledge and ability of the change recipients in the new ways of working and skills related to the product or solution that is being developed.

Furthermore, activities are also intended to take place, focusing on quiring new talent to address gaps and to secure and improve the employee experience. The coaching & resistance management activities concerns identifying the root cause of resistance, removing fears and barriers among internal and external stakeholders. Additionally, this enabler is also intended to target the behavior, values, attitudes, and “What's-in-it-for-me” question, as these are considered to be key activities.

Phase 5: Adopt/Scale

This phase concerns external deployment and is initiated by an initial handover to end users. This is followed by demonstration, training and education. Lastly, further tests, validation and feedback sessions are meant to be carried out. When these activities are done, the intention is to come to an agreement about final details and conduct a deployment sign-off. Throughout this phase the tracking and follow-up of KPIs and metrics, the training/education, coaching/resistance management, communications and stakeholder management, operational readiness and change agent networking activities are intended to continue. In accordance with the model, no new enabling activity is set to be launched.

Coaching, resistance management, change agent network and operational readiness activities are however intended to end, by the end of this phase. Despite this, local and contextual adaptations might occur for specific projects. As a result, the start and ending of a particular phase or enabling activity might vary. The aim in this phase is furthermore to scale, anchor and enhance adoption of e.g. the new product, service, solution or new ways of working by carrying out deployment activities. This is to be complemented with maturity criteria’s (*entry/exit criteria*), formulated in the handover and readiness plan. These activities and maturity criteria’s concern e.g. sign-offs from stakeholders regarding the coordination of deployment activities, demonstration and sign-offs regarding impact, business value and investment, detailed consideration to technical readiness for enabling deployment, a review of allocated budget and resources required for deployment, delegation of ownership and new roles, activities focusing on increasing engagement commitment and dedication of key stakeholders, education and training, follow-ups to track value and business impact.

Phase 6: Sustain/Evolve

This is the last phase in the identified CM strategy at the case company. In this phase the focus is to ensure that the organization, potential end-users or customers can realize the full potential of the change. Key activities concern monitoring activities related to the adoption of applications and solutions, capturing feedback and the management of potential new requests and lastly to conduct validating activates focusing on customer and user experience. At the end of this phase the track, follow-up and reinforcement, training and education, communications and stakeholder’s management activities are officially intended to end, as shown in figure 3. When maturity and exit criteria are fulfilled during this phase, the handover and execution is intended to be transferred to the line organization, end-users, customers or other groups of stakeholders**.**

In parallel, formal structures are to be adjusted to integrate, support products and solutions, reinforce behavioral changes, reinforce the adoption of the new tools, methods and ways of working. In some of the projects in the transformation program, the entire change process also involves prior, during and post-deployment workshops. Workshops are intended to focus on activities concerning capturing feedback regarding the adoption process, follow-ups on the old and new processes, validation and assessment of intended and realized value. The workshops are also intended to be used to share success stories to spread a positive image and enthusiasm of the change, as it is considered to be crucial to e.g. show concerned stakeholders that others are embracing the change, that leaders and managers act as role models and to apply a LEAN management inspired poka-yoke approach. The CM models ends with activities revolving around measuring, sharing and visualizing proof points of value realization to further convince and boost adoption.

6. Analysis and Discussion

In this part, will research problems, identified gaps and differences be analyzed and discussed in an interconnected, in-weaved or overlapping manner. The reason is to be able to identify and cover the breadth and width of the most relevant and significant challenges, opportunities, strengths and weaknesses in the context of CM-related activities and factors. Thus, are the current CM strategy and the lessons learned, analyzed, compared and discussed in relation to the conceptual CM model.

6.1 Current CM Strategy vs. Conceptual CM Model

The main phases in the focal CM approach at the case company are compared against the main phases in the conceptual model below. The parallel and enabling activities are moreover incorporated into the phases to facilitate a coherent analysis and discussion.

6.1.1 Comparison of the Current CM Strategy and the Conceptual CM Model

Based on the design, the content and purpose of this model, can it be interpreted to be aligned with what many researchers have already stated, namely that CM practices needs to be planned and controlled, in order to move an organization from a current state, through a transition to a desired state, whilst bringing business results from a state of aspiration to realization. This is evident from how the CM model is composed. Therefore, an interesting empirical finding is that the company is utilizing a structured approach to CM, despite that many researchers have claimed that there is a lack of structured and systematic approach to CM among practitioners. The model clearly takes a structured approach to the people side of projects and business changes, and is targeting a systemic life-cycle of activities, enablers and processes that can support the company to initiate, plan, control, stabilize, to anchor change capabilities and processes to serve the needs of internal and external stakeholders.

The conceptual CM model (*based on the theoretical findings, depicted in figure 2*) has both differences and similarities with the general CM model applied at the case company. An overall similarity is that both models are portrayed in a processual model, aiming to contribute to an improved ability to undertake change initiatives. Additionally, both models are composed of two parts, a sequential process of phases and secondly, a mixed set of activities, enablers and guidelines, which are performed and managed in parallel to the main sequential phases. Regarding differences, the conceptual CM model does not specifically discuss nor visualize its parallel phases, meaning that a particular activity, enabler or guideline could potentially fit equally well in a neighboring phase. Instead the conceptual CM model points out that the parallel activities and enablers should be carried out in an on-going manner, continuously throughout the CM lifecycle, leading phases and supporting activities and enablers to overlap and coincide.

The new projects within the transformation program might encounter a valley of despair, as discussed in the theoretical findings, leading to project challenges such a reduction in productivity and an increase in resistance during the change process, to mention a few examples. Such challenges are not clearly discussed or targeted at the case company. Instead, the approach is that challenges related to e.g. stakeholder resistance will be managed along the way as they turn up.

These challenges are however considered to be possible outcomes, and might occur due to new technology introductions, new ways of working, changes in job roles, people's reactions and behaviors, lack of awareness, understanding, acceptance and commitment for the new changes or unlearning and learning of skills. Additionally, is the approach that new ways of working in the transformation program, characterized by e.g. an increased and focused customer-proximity, in combination with agile PM methodologies will mitigate potential challenges related to circumstances around stakeholder management.

6.1.2 High-level Analysis of Agile Methods in relation to CM Practices

Most of the projects in the transformation program are using agile project methodologies. In comparison to the theoretical findings, non are describing the influence of agile approaches to PM on CM practices, models and activities. The result shows that applying agile methodologies could be beneficial as it could support some aspects of CM practices, as e.g. ineffective or unfavorable plans could be mitigated or that early decisions could be handled better, in comparison to traditional and sequential project methodologies. Furthermore, applying agile methodologies can be beneficial when there is a lot of uncertainty in the exact formulation of e.g. a product, solution or way of working and the requirements are unclear. CM activities and factors that can be interpreted to be aligned with benefits of agile methodologies can be characterized by the rapid and efficient development process in which daily and frequent interactions and cooperation takes place with regular reviews and adaptations that minimizes risks (*e.g. with constant changes*) whilst stakeholder satisfaction may increase gradually (*constant deliveries*).

Other examples of how agile approaches can influence CM practices, may be that a higher product quality can be achieved, reduction of risks or enhanced visibility related to performance of a change initiative. This is relevant as testing and validation is heavily integrated into the development and implementation process, the project team may also be able to perform regular reviews and thus continuously identify areas of improvement that can satisfy stakeholders. When it comes to risks, an agile PM approach might eliminate or minimize risks and the chances of failures, especially as work in sprints from an early phase may allow project teams to develop and implement minimum viable products, solutions, tools or ways of working early on. Alternatively, may it allow project teams to fail fast, make adaptations and change approach accordingly. An agile approach might also allow project teams to have better insight into progress and realized values. For instance, could frequent scrum meetings and sprint reviews provide an increased visibility to all stakeholders, project teams, involved leaders and managers. The case company might subsequently be in a good position to conduct effective CM practices as the benefits above could ultimately lead to an increased control of change initiatives, which could enhance participation, involvement and stakeholder commitment throughout the CM lifecycle.

It is also important to point out that the theoretical findings e.g. highlights that a clear, pre-planned, detailed and concise vision of the future and desired state is critical to formulate in the initial phase of a change initiative, as well as that the changes needed to realize the change must be communicated in a structured, coherent and consistent manner. In this regard, might an agile methodology be problematic and contradicting to the proposed CM practices listed in the conceptual CM model. Additionally, might dedicated agile project teams have specialized focus on the functional aspects of a particular project, which might lead to unfavorable and unexpected risks in developing products, solutions, services or tools that actually creates value or results that is truly appreciated by end-users, customers or stakeholders.

In relation to CM practices, further weaknesses with the agile approaches utilized at the case company might be that the projects may end up over budget, as projects are usually allowed to constant changes. In such way might agile projects more easily deviate from initial plans and thereby easily gets off-track (*in regard to whether e.g. the product being developed actually fits project requirements and has stakeholder acceptance)*. As laid out by many researchers, allocating enough, necessary and timely resources to conduct CM practices whole-heartily, has long been considered a challenge. Following this logic, it can be risky, and affect CM practices negatively (*especially aspects related to time and resources management*).

Another risk related to the use of agile project methodologies and its influence on CM practices, may be that initial assessments can be difficult to manage. Such an aspect differs heavily from what is laid out by the theoretical findings, namely that CM practitioners should put a lot of emphasis on pre-studies and initial assessments (*e.g. to prepare and work on stakeholder readiness and management*). Thus, agile projects are difficult to plan for in detail (*in advance*). This might cause problems for CM practitioners. Especially, if one takes into consideration that CM revolves around that CM needs to be clearly planned, steered, controlled as means to ensure smooth anchoring, adoption and institutionalization of changes.

Conclusively, agile approaches applied to the current projects do coincide and influence the course of action related to CM practices. Therefore, if an agile project method would be applied, supported by CM practices, then this could potentially lead to an increased satisfaction, agreement and commitment with a project and its stakeholders, and thereby potentially promote further adoption of a certain solution or way of working. Especially, if e.g. novel solutions or products are constantly validated with customers or end-users, then this could lead to increased and frequent stakeholders' interactions, communications and end-solution deliveries. In such case, might it be fair to assume that this might eventually result in an increased organizational productivity and ROI.

Consequently, can it be favorable to utilize an agile project methodology to enhance and further improve CM practices, or vice versa, namely to utilize CM practices to further improve agile project methodologies, despite the disadvantages of agile approaches related to difficulty to assess clarity and details in plan, skills, efforts, time and resources needed, whilst projects easily get off track. Additionally, it is important to highlight that CM and PM are two very closely intertwined management disciplines, as pinpointed by many researchers (*in this study*), regardless of the characteristics of traditional (*sequential and waterfall*) or agile PM approaches.

6.1.3 Discussion on Practical Implications of Agile PM on CM Practices

The analysis and discussion below, derives from previous sections, empirical findings from the case study (as two common themes or topics among the interviewees have focused on organizational silos and agile practices), and the theoretical findings listed in the conceptual CM model (related to CM activities and factors).

From a practical viewpoint, change practitioners and leaders could facilitate potentially improved CM practices by enabling adaptability and agility in the change process, to address inconsistencies and changes in project requirements (*even late in the PM/development process*).

Other advantages refer to deliver results faster and more frequently, enhance participation, collaboration, build trust, motivation, and commitment in the project among stakeholders, convey communications more efficiently, easier tracking and measuring of progress and business impact, ultimately prevent change fatigue and thereby promote sustainability and institutionalization of changes. In such a way could the identified inadequacies and gaps in the current CM strategy be addressed. Other influences and implications of agile PM may also give rise to challenges and weaknesses regarding CM practices. Based on the case study, the current CM strategy and practices (*which is highly influenced by an agile PM method*) do not address the following aspects in-depth. These refer to the discomfort of stakeholder, change resistance, nor support of organizational culture to enhance CM goals and purposes.

As laid out by many researchers, CM can be defined as the process of initiating, planning, controlling, stabilizing, and evaluating the transition from a current state to a desired state. Based on the CM definition, agile influences and implications on CM practices might be problematic, especially as it can be interpreted that the baseline for CM practices are suggested to be somehow planned in detail (*in advance*), and thus controlled throughout the entire CM life-cycle. When it comes to planning CM practices and processes, it can be assumed that the further ahead a plan goes, the less flexible, responsive, or agile the change process will be regarding changes in scope and requirements (*which might give rise to e.g. CM challenges*). In this regard, the appropriate balance between achieving stability and control might namely cause difficulty in e.g. accountability, power-relations, influence, and subsequently stakeholder and communications management. These challenges might be compounded when an organization operates globally, in a centralized and matrix-like organizational structure, with multiple agile projects with multiple use cases, and diverse groups of customers and stakeholders simultaneously. If a company is customer-centric in many regards or if that customer-centricity is highly regarded (*like in the case company*), then it can be assumed that a customer-driven approach to CM practices might be suitable when it comes to adapting CM-related activities and efforts, to e.g. satisfy stakeholders, customers, and employees. From this perspective, might influences and implications of agile PM methodologies on CM practices be highly motivated.

Influences of agile PM methodology on CM practices might also cause or lead to fairly unnoticed or unexpected problems. A concrete example would be that an organizational silo approach could sneak into and become apparent with the use of agile PM methodologies and agile teams (*in regard to groupings of expertise, responsibilities, specialists into teams*). This could potentially lead to the management of project work in specialized and isolated groups, teams, units, and functions, and thus give rise to the appearance of a silo approach. Therefore, PM and CM, leaders and managers are recommended to be on the lookout for warning signs, such as if they are experiencing that an agile approach leads to cross-functional inefficiencies or conflicts (*e.g. low transparency or conflicting job roles*), more silo work or approach, or whether a project or change initiative is connected to the wider organization. For instance, business analysts or product owners typically represent business or end users' needs and desires (e.g. *for solutions, products, or services*). Related to the issues with silo work, might managers like the aforementioned be unaware of technical, cross-functional and business complexities, difficulties and requirements.

Moreover, the autonomy and flexibility of agile PM methodologies do not imply unconditional freedom to simply ignore the business environment around the agile project or team, because an organization is simply more than the sum of its projects or teams. Also, not all collaboration fits within a specific location (*co-locating teamwork*), chapter, guild, or team, chapter.

The use of agile methodologies can according to many interviewees bring many advantages related to focused, rapid delivery, learning, iteration, validation, and signoffs of results. Since the outcome of the projects were not measured or analyzed in this study, it is difficult to assess how productive the aforementioned benefits are in reality. This is yet another topic worthy of further investigation. However, in a potential case of low adoption rates, unsatisfactory CM results and failed attempts to implement agile practices, then this would imply that it might be strongly motivated to constructively discuss and reflect upon the application of agile methodologies as well as the influences and implications of agile methodologies on CM practices and results. Consequently, are practitioners suggested to be on the lookout of warning signs, related to the conclusion stated above.

Conclusively, could impediments and inconsistencies related to an agile and silos approach however be handled and somehow mitigated from a CM perspective. For instance, could more emphasis on a single and clear CM approach, with partial adoption and application of agile values and principles, potentially help an organization like the case company to select and dedicate themselves to CM mastery. The partial and combinational adoption of CM and agile PM practices (*as previously mentioned*) might be more suitable because (*and in line with a few interviewees have mentioned*), that is can be "easy to cheat". Meaning, it might be difficult to stay fully disciplined and dedicated to agile values and principles throughout a n entire change or project lifecycle. Instead, it might be easier to do slow and long rather than speedy (*and truly*) and agile work practices. Thus, might it be relatively easy to simply conduct daily stand-up meetings and have scrum boards, whilst much harder to hold the agile team accountable or to have dedicated product owners. Accordingly, might an indecisive or undisciplined agile practice cause complications for CM leaders and managers regarding the development of a project, stakeholder, and communications management.

Under the assumption that the case company uses sequential and traditional waterfall PM methodologies coordinated with CM practices (*in a wider organizational context*), could an application of agile practices instead lead to unexpected challenges, inabilities, or issues. However, this requires further studies (*as discussed in the future studies section*). For instance, could issues arise related to asynchronous communications, stakeholder management, misaligned support of both management control systems and corporate culture (*cultural barriers*) to agile PM methodologies. If agile teams presumably are equated to self-managed teams, then this could potentially threaten predominated and traditional management control systems (*related to manual approvals and control of decisions and processes*), lead to ineffective management collaborations (*e.g. between high and mid-level leaders and managers)* or a lack of empowerment between leaders and managers.

Moreover, is it possible that the use of an agile PM method could lead to unexpected and compelling changes in the management style (*compared to traditional practices*), as it might require frequent, continuous and consistent communication and support from leaders and managers. In contrast, agile PM methodologies might push back and challenge potential silo approaches as agile practices in essence might require effective and sustained cross-functional empowerment and collaborations, dedicated duties, joint accountability, control mechanisms, and allocation of resources. The bottom line is that there are plenty of reasons any major change initiative can fail, and that influences and implications of agile PM methodologies on CM practices hold great promise with the opportunity to dramatically improve CM practices, as means to reap potential rewards, increase in adoption rates and subsequently, realize improved organizational performance.

6.1.4 In-depth Analysis of Current CM Strategy and Conceptual CM Model

Phase 1: Decide/Define vs Diagnose Phase

Similarities

At glance, both the diagnose phase in the conceptual model and the general CM model appears to overlap and coincide. Especially, when it comes to assessing and clarifying the motivation, underlying assumptions or prerequisites (*e.g. needs and demands*), business case for the change, change impact assessment, stakeholder and communications management. For instance, the stakeholder analysis and management addresses how to facilitate and support the change progress by targeting the influence, interest, support and buy-in of different stakeholders' groups, which coincides well with the theoretical findings. Other similarities found in both phases emphasizes the formulation of a unified and compelling story and vision of the future state. These are activities that will help the organization to create an understanding of the current state, implications of the change endeavor and what supports the change. Another common factor is the focus on onboarding activities for change leaders (*hand-over of responsibility*), focusing on further development of CM skills and providing change leaders with necessary resources and support to drive and realize the change. Furthermore, both the current CM strategy and the conceptual CM model, embody the initiation of a change readiness analysis and activities. This enabler revolves around activities that focus on assessing readiness (*for instance new capabilities or digital maturity*) and thus, creating awareness and deeper understanding of both internal and external users and customers' needs and demands.

Differences

A difference between the two models is that the readiness analysis given by the CM model at the case company, is intended to be initiated at the midst of the Define phase and end up halfway into the Prototype phase. In contrast to the conceptual CM model, no clear start or ending is presented, allowing for a greater flexibility in adaptations and adjustments. This does not mean a relative strength or weakness in the company's CM model, as the intention with the company's CM model is that local and contextual adaptations are clearly advocated. In regards to other opposing aspects and differences presented in the conceptual CM model and theoretical findings, that have not been given any extensive emphasis in the CM model at the case company, refers to the assessment and clarification of inter-relational dependencies between organizational elements such as corporate culture, structure, reward system, preparedness and maturity of stakeholders (*e.g. staff and skills*), and furthermore to what extent they have been taken into account in their current CM practices.

Corporate Culture Alignment with CM Practices

The theory that underpins such a wide assessment, heeds the alignment and mutual reinforcement of organizational elements, as an alignment of corporate culture and CM practices subsequently could increase the chance of organizational success by making key parts of the organization work together, more efficiently. In practice, this would mean that an analysis needs to be conducted, focusing on determining and comparing the gap between e.g. current and future ways working, and in such way spot possible differences in corporate culture.

Applied to the CM approach at the case company, this would imply that their current CM strategy of increasing adoption rates as means to support and develop organizational capabilities, must be consistent with corporate culture and work-ethics (*characterized by a speak-up environment, empathy, humanness, cooperation, collaboration, speedily execution, fact-based and courageous decisions)*, the project organization, the overall organizational structure (*which is global, centralized and matrix-like*), the staffing requirements, skills, capabilities, and resources for the project in question (*could be generalized to new capabilities and competence*).

In accordance to the theory, if the above mentioned dimensions do not match the rest and are not aligned, then this could render in unfavorable implications that could make it difficult for the company to realize the full potential of the their change initiatives. Based on the lessons learned, examples of unfavorable implications could be unclearness in vision, ineffective communications, involvement, unclear responsibilities, increased risks or ineffective stakeholder management. A disadvantage is however that conducting such an assessment can be considered to be time-consuming, costly and complex, as it might be difficult to assess the dynamics and the degree of fit between various organizational elements with high accuracy.

Phase 2: Prototype vs Design Phase

Similarities

The design phase in the conceptual CM model and the prototype phase in the CM model at the company are comparatively similar as they have a few factors in common, whilst the conceptual CM model stretches even further to include additional CM-related activities and factors. Between the two models, the factors that coincides and overlap are the following: communications and stakeholder analysis, readiness assessment for how to manage resistance throughout the change process (*e.g. by focusing on answering the what's-in-it-for-me question*), further development and refinement of the change vision and story, definition of KPIs and metrics (*including entry and exit criteria's*), development of plans focusing on both short and long term KPIs and metrics, and emphasis on how to follow up and monitor results and progress and the emphasis on avoid planning the whole change process in great detail in isolation *(supported by the adaptive agile planning approach*).

Additionally, the impact assessment that is initiated during this phase (*in the CM model at the case company*) refers to creating understanding of how processes, competence, incentives, culture and tools will be impacted by the change. Although this phase is intended to address incentives and cultural aspects, the case study indicates that these have been poorly addressed in practice. The communications activities furthermore strive to ensure awareness, understanding and buy-in related to the need to change (*the why*), as well as benefits and value the change brings, by targeting customers, internal users and other key stakeholders. As shown in figure 3**,** the communications management stretches throughout the whole change process (*similar to the conceptual CM model*), and aims to empower employees in real-time through transparent, multi-way communications, data-driven messages, utilization of digital tools, apps and websites and by adapting communications (*and value tracking*) activities and channels for different stakeholders.

Differences

Relative to the CM model at the case company, deviating factors contrasted in the conceptual CM model focuses to a larger extent on assigning resources and conducting a detailed pre-study, preparing for how to officially end and separate from the past and previous projects and later mark a new beginning in the organization at large but also among the concerned stakeholders (*internal and external*), a continuous communication of the case and story behind the change, the clarification of what will remain the same**,** assessment of the organizational culture, the planning and preparation of changes in corporate culture months before setting plans into action and the involvement of HRM practitioners in the change process. The conceptual CM model also highlights the importance of differentiating between project and CM goals, and furthermore that one should seek new or alternative ways to showcase and visualize KPIs, metrics and results related specifically to CM. Business cases must also be quantified to ensure return on investments. In addition the set-up of regular mechanisms to assess stakeholder satisfaction, commitment, effort and the capability for change is also considered to be an important enabler in conceptual CM model, as it is important to know when to take actions, e.g. momentum is lacking or when the commitment of key stakeholders are decreasing.

HRM Practices Incorporated into CM Practices

The identified dissimilarity between theory and CM model at the case company, focusing on involvement of HRM practices, is an interesting aspect that will be discussed next. Based on findings from the case study, the involvement and incorporation of HRM-practices into the CM model and transformation program is limited. CM practitioners at the case company are aware of the benefits but are yet to utilize HRM practices to support change initiatives. Furthermore and under the assumption that HRM practitioners are experienced in and have well-established practices for e.g. managing people in an organization, recruiting, dealing with conflicts, develop impactful communications, training, monitoring employee (*or stakeholder*) satisfaction, performance, motivating people, facilitating effective working conditions or fostering corporate culture, the act of merging and employing HR practices with a CM strategy can be considered to be important because it could increase favorable CM outcomes, whilst minimizing unfavorable consequences of change initiatives, to the better.

Following the definition that points out CM as a structured approach to address the people side of change initiatives, aspects such as resistance, capability and adoption to change, an active, mediating and facilitating role of HRM professionals in any change initiative can therefore be considered to be mainly positive and beneficial. There might however be disadvantages with incorporating HRM practices with CM practices. These refer to the unpredictability and lack of adaptability of HRM activities to follow structured plans, increased expenses as HRM practitioners are getting involved in the change initiative. Another disadvantage involving the HRM department might give rise to a conflict of interest and unclear accountabilities, namely that it might require top management and leaders to withdraw influence or control of how to conduct CM practices.

PM vs CM

As laid out by the theoretical findings, both PM and CM aim to support and move an organization from a current state through a transition state to a desired future state. PM however focuses more on planning, developing and implementing tasks and technical aspects to achieve project requirements while CM focuses on supporting the people affected by the change, whilst gaining their acceptance and commitment. Apparently, both PM and CM have evolved as disciplines intended to provide structure, activities and enablers needed to realize desired goals, related to either technical aspects of PM or the people's side of change endeavors.

It can however be interpret that the goal of PM is to effectively deploy plans and resources in a structured manner to develop and implement new products, tools, solutions or ways of working (*e.g. in terms of what needs to be done, technical specifications and quality issues, changes in processes, systems, organizational structure),* while the goal of CM is to support individuals, groups or organizations impacted by the change to make a successful transition (*e.g. training, learn new skills whilst simultaneously securing adopting to and the utilization of the new product, solution or way or working that have been changed or developed in the project*). Based on this logic, having achieved and approved PM goals, is therefore no guarantee for reaching the intended CM goals and business impact. This might have to do with the fact that the purpose or benefits of projects oftentimes are realized long after the actual completion and implementation.

Consequently, can it be reasonable to claim that PM and CM metrics and KPIs must differ, as the change process continues and goes beyond (*until business impact or benefits have been realized*) the project that is supposed to create the change. In other words, PM results must initially be adopted and used, before any business impact, benefits, productivity increase or ROI can be realized. Therefore, dedicating particular emphasis to follow-up procedures is a critical factor. The empirical findings from the case study, showcase that PM and CM goals are distinguished. Whilst this might be considered as both positive and obvious for some CM managers, leaders and practitioners, the theoretical findings imply the contrary, namely that managers and leaders oftentimes mix up PM and CM goals, which causes different and wishy-washy expectations, confusion and misunderstandings. The case company could however put more emphasis (*and potentially improve their CM practices*) in regards to allocate resources that targets the planning and management of follow-up activities and measurements regarding value tracking of benefits and business impact, long after the completion of current on-going projects in the transformation program.

Phase 3: MVP vs Readiness Phase

Similarities

Regarding comparability, both the MVP phase and the Readiness phase in the conceptual CM model focus to a considerable extent on similar factors and aspects. These refers to: Reaching awareness, understanding and buy-in among stakeholders, preparing for deployment and anchoring activities that revolve around getting acceptance and commitment, the initiation and development of e.g. new tools, new ways of working, new products and solutions, the setup of feedback mechanisms and procedures (*e.g. stakeholder surveys, signoffs, workshops*), the actual gathering of insights and feedback of stakeholders, engagement and involvement of change recipients and activities revolving around joint diagnosis of e.g. new solutions.

Differences

Furthermore, the conceptual CM model highlights the importance of framing the change as a positive endeavor by creating enthusiasm and desires, whilst providing attractive and guiding images of the improved organizational benefits and multiple ways to ensure an adoption of the new ways of working. This is considered in the current projects at the case company, in the format of explanatory and overviewing newsletters and media content. Based on the findings, the aforementioned aspects tend to be slightly underestimated, as only a few interviewees have highlighted and discussed these particular aspects. On the contrary have these aspects instead been more prominently stated in internal documents and presentations (*which have focused on the change for change, the purpose and the why*). This indicates that these aspects have been considered, whilst some interviewees have not ideated this during the actual interviews. Regardless, these aspects focus e.g. on use cases and aims at creating excitement and engaging the creative imagination of affected stakeholders, and thereby draw attention to how new ways of doing things will make a difference, compared to the current situation (*thus secure commitment and drive*).

Other dissimilarities have been identified in the Readiness phase in the Conceptual CM model, while lacking in the MVP phase in the CM model at the case company. These concerns the importance of continuously communicating the urgency of the change endeavor in tandem a successive increased communication focusing overall positive benefits and the need for change, in a coordinated and coherent manner. An additional difference refers to the importance of identifying ways to utilize and leverage the corporate culture to benefit the change activities and processes. This aspect was neither discussed nor found in the empirical findings of this case study.

Burning Platform and Poka-Yoke as Guiding Principle

The theoretical findings suggest that the case for change must be communicated throughout the whole change process. This is considered to be important as a means to convince employees and mobilize commitment and signal that the change is important and urgent (*e.g. internal and external drivers are real*). The theory also implies that this must occur throughout the entire project, and not necessarily something that shall be done in the initial phases of the change endeavor. This coincides well with what the theory described as the burning platform metaphor or technique. Namely, to communicate the current and real challenges, and thus make it difficult to choose the option of sticking to old products, tools, solutions or ways of working, whilst making it easy to e.g. choose and adopt new products, tools, solutions or ways of working.

In contrast, the case company is currently applying a LEAN management inspired technique called "Poka-Yoke" in tandem with a "*Burning Desire Approach*" to a project in the transformation program. This refers to setting up long-lasting mechanisms that prevent employees from making mistakes or errors and promote change in a positive manner. Thus, does the theory not discuss Poka-Yoke or the Burning Desire, but rather a traditional approach to a Burning Platform approach. Despite this difference, does this Poka-yoke principle and the Burning Desire approach coincide only partly with the burning platform strategy listed in the theoretical findings. The Burning Desire and Poka-Yoke approach can in this context also be described to stretch further, as means to provoke effective reactions that prevent stakeholders from wanting to continue or stay with the status quo.

The interviewees have furthermore proclaimed that the traditional approach to burning platform strategy is outdated and obsolete as it has a narrow focus on provoking change in near-time, unfavorable reactions and might not result in long-lasting acceptance and commitment. The Poka-Yoke principle combined with the Burning Desire approach allows furthermore for identifying issues and mistakes before they occur. In this way, can the Burning Desire and the Poka-Yoke technique clearly be distinguished. Although the company has not explicitly formulated this guiding Poka-Yoke principle as a key part of their current CM strategy, has it in spite of this actually been considered, incorporated and applied to their current CM strategy and projects. Thus, one could assume that the project is in a favorable position to enhance the outcome of CM practices. Although there seems to be a difference between a burning platform and a burning desire approach, the latter tends to be similar and cover aspects that are already listed in the theoretical findings. For instance, when it comes to showcase positive aspects of a particular change, and thus creating excitement and engaging the creative imagination of affected stakeholders, and thereby draw attention to how new ways of doing things will make a difference.

In addition, drawbacks of the burning platform strategy might be that it can be interpreted as insensitive, which might cause unfavorable reactions and emotions. If one assumes that fear is triggered by the use of this technique, then the theoretical findings pinpoint that this could lead this could cause people to turn more conservative, preserving the status quo or taking fewer risks. Thus, this could lead to making people less willing to change or that employees lose faith in their managers. Therefore, if this approach would be applied, then it may be reasonable to state that it must be applied with caution, while one ensures and also communicates positive aspects, benefits and opportunities of why a change is needed, who are affected by the change and provide guidance and support on e.g. how to adopt new ways of working and develop necessary skills. Additionally, would it be favorable if this approach is supplemented with frequent communication on the current situation, scanning the business periphery, involving passionate and informal leaders, clarification of customer and employee satisfaction.

Leverage Corporate Culture to Promote Change

Based on claims from interviewees in this study, the case company tends to generally have a strong, attractive and reinforcing corporate culture. However, the empirical findings (*related to the lessons learned and current CM strategy*) in this particular case study indicates that the case company has a continuing need to put more emphasis on incorporating corporate culture to support changes. Regarding the studied projects in the transformation program, is there an insignificant amount of evidence that actually proves that the corporate culture has been incorporated into the CM strategy in a comprehensive manner, in contrast to what is suggested by theory. This might be a weakness in the current CM strategy.

Therefore, one could assume that an untapped potential exists, as the corporate culture has not been fully leveraged as a means to enhance the change process, secure adoption and ultimately realize business impact. If a corporate culture is considered to consist of unwritten rules that governs behaviors and daily work of employees, which affects the efficiency and direction of an organization, then it would be reasonable to assume that one must understand these unwritten rules (*consisting of e.g. motivators, enablers and triggers*) before they can actually be changed. Moreover, it can be presumed that change initiatives must harmonize with the unwritten rules of any organizational culture, and simultaneously correspond well with what employees interpret as motivating and meaningful, to both enhance change process, ensure commitment and ultimately institutionalize changes.

Consequently, and in line with the definition of CM, it comes down to the management of employees, corporate culture and human elements. Therefore, if one knows how employees work, communicates, what they like and dislike, their strengths and weaknesses, a change leader or manager could then utilize this (*the insights from the culture*) to plan out the most effective ways to apply the changes. Hence, could a CM strategy that leverages corporate culture to promote changes, ensure that a smooth transition and adoption of changes, in comparison to alienating stakeholders with massive shifts in practices, that e.g. could become a massive rift that leaves a project team, stakeholders, end-users, line-organizations or customers to feel like they're being ignored or disregarded. In conclusion, some opposing aspects of targeting the corporate culture might be that it is difficult, complex and time-consuming. Something that potentially goes apart from the corporate culture when it e.g. comes to speedily execution.

Phase 4: Release vs Implement Phase

Similarities

A dozen of conformities have been identified between the Implement phase in the conceptual CM model and in the Release phase in the CM model at the case company. These refers to aspects such as communications, stakeholders management, dedicated allocation of time and resources for manage and engage stakeholders in the new ways of working, training of e.g. new skills or participation in the execution and development of e.g. new solutions or products, utilize the change agent network, implementation of change in small and manageable distinct steps (*pilots and MVPs*), the transfer the best practices and knowledge gained to a broader deployment (*scale up deployments*), aim at achieving early wins and adopters, the utilization of individual behavioral models to explore, monitor and gain insights related to reactions, behaviors and emotions that individuals may experience and show during the change process (*although that this case study implies that only a limited application*), and lastly an assessment, preparation and assurance of that the stakeholders (*e.g. customers, end-users or change recipients)* are ready to adopt and integrate the change.

Also, a continuous cycle of monitoring, reviewing these above-mentioned aspects are considered to minimize potential problems that might arise and helps to keep the change on track (*similar to what is stated in the conceptual CM model*). The CM approach applied in the transformation program, is to a substantial extent characterized by agile methodologies with e.g. incremental deliveries of results. As laid out by the theoretical findings, small and incremental deliveries are beneficial. Accordingly, can the change model applied at the case company be considered to be advantageous and in line with theory from this perspective.

Differences

In comparison, the conceptual CM model stretches a bit further by also highlighting the importance of additional aspects. These revolves around spreading and making early successes visible to all stakeholders groups, the importance of striving for an impactful and concise communications (*consisting of both qualitative and quantitative benefits and results)*, and lastly ensure and secure patience among top management and leaders (*especially as different stakeholders are at different stages on the change curve).* As laid out by both the theoretical findings as well as the lessons learned, stakeholders pass through the change process at different rates and in diverse ways. Some might also fall back to an earlier stage and others might skip a step and continue to the next one.

Therefore, is it might be reasonable to assume that one cannot expect every stakeholder to e.g. be ready at the same time to implement or adopt certain changes, as some stakeholders might need more information and support to be further convinced, some might require the top management to demonstrate attention to the change, while others might need more training to feel prepared.

Success Stories, Early Adopters and Early Successes

The agile elements applied in the current and on-going projects may also coincide and subsequently influence the outcome of the CM process, under the assumption that breaking down projects into smaller iterative chunks does not compromise on the overall quality nor cutting corners in the project scope (*to an excessive extent*). Moreover, does the identified CM-related activities and factors highlight that creating short-term wins could ensure managers and leaders to support employee morale, whilst showcasing that the change initiative is moving in the right direction by communicating early successes to all stakeholders. From this perspective, can the current CM strategy be considered to be somehow be aligned with what theory points out as an important CM factor. Besides, could early successes be used as means to capture, replicate and scale up project deployments in an efficient manner, at an individual, group and later at an organizational level.

Another aspect has to do with what extent success stories are formulated and spread at the case company, within their current transformation program and projects. The case company is currently spreading success stories about early successes, especially successes and stories regarding early adopters and customers of e.g. new products, services and solutions (*this appears to be true for customers that want to stand out and appear in the limelight and front-end of technology introduction as some view this as beneficial branding opportunities*). Despite all of the importance of the aforementioned aspects (*regarding the spread of success stories*), this is not considered as a standard and well established practice (*according to the empirical findings in this study*) and could therefore potentially be improved to also cover a continuous stream and spread of both internal and external success stories. The importance of this aspect is moreover laid out by theory, as success stories let internal stakeholders know what is desired in the organization, whilst allowing stakeholders to reflect on whether they could do anything similar and how. The core idea is to utilize these success stories as means to reinforce small contributions with positive and indirect reinforcement and suggestions to change behaviors and reactions of individuals and groups, with a continuous and successive approach.

Along a similar line, one must remember that changes always happen over time and often occur in a progressive manner, when it comes to transition from a current state to a future state. Following this logic, it could be assumed that change recipients, stakeholders, customers or employees are e.g. accepting, committed to or adopting changes in an unsynchronized and varied way. In accordance with theory, anchoring of changes often targets early adopters (*these usually have a relative high tolerance for risks and are more likely to see the potential of new product, solution technology or way of working*), before an early majority, late majority or laggards starts to consider and adopt the new changes, in which one group oftentimes influence the next.

Consequently, could one assume that acceptance and adoption of a change may vary significantly, and that without early adopters a huge adoption rate might be considered as unrealistic. It is therefore suggested that CM practitioners should aim to bridge the gap between early adopters and early majority of any change initiative, as means to gain traction in the organization and in such way institutionalize changes. To support this, CM practitioners, leaders and managers could aim at getting influential and informal leaders and managers to boost momentum when switching focus from early adopters to an early majority. Moreover, could incremental and iterative successes and deliveries of benefits convince, enhance trust and encourage stakeholders, change recipients or customers, and in such way could an increased number of adopters to a particular change initiative be achieved or realized.

Additionally, could iterative and incremental, successes and deliveries provide a desired, effective and end-user focused solution, tool or way or working. This can be considered to be of great importance, as laid out by the findings (in *the introduction and case study chapter*), the technological developments are happening at an increasingly fast pace (*across all industries and organizations*), which leaves organizations in the ICT industry (*like the case company*) with lengthy projects with considerate expenses and risks of unrequested, outdated or undesired outcomes. Ultimately could iterative and incremental deliveries, have positive implications on the time-to-market aspect, lead to reduced costs or improve the effectiveness of the organizational developments, which altogether could be extremely valuable from both a social, economic, legislative and competitive perspective.

Apart from reduced costs and improved (*more realistic*) resource management, could an increased time-to-market, be considered to be aligned with the corporate culture of the case company, namely, to e.g. be fast moving and execute speedily. As the transformation program at the case company can be considered to be comprehensive, lengthy and resource intensive, a dynamic, iterative and incremental approach to deliveries could be beneficial, which in turn might be highly relevant when it comes to other aspects such as keeping skills and competence within the projects, employee turnover, absence and desires to move (*change positions*) within the organization.

Another factor highlighted in CM literature pinpoints the importance of having an impactful and effective communication strategy. Furthermore, does the conceptual CM model imply the importance of focusing on both qualitative and quantitative benefits. Apart from traditional financial or other logical KPIs and metrics, a communication strategy should apparently also focus on communicating emotional benefits, stakeholder satisfaction, whilst creating value, encourage behavior shifts (*not only actions*).

In other words, are communication strategies suggested to be more closely linked the change initiatives with e.g. emotional benefits. In such a way, could additional benefits be realized, as change initiatives then could be interpreted as more appealing and naturally encouraging. Communication should also encourage how to perform new ways of working to reach a certain goal, and not necessarily to actually perform a certain task or action. This is considered to be a way to inspire and drive behavioral shifts, which subsequently allows changes to stick. In comparison to the CM practices at the case company in the transformation program, these aspects have been considered. Despite this have many interviewees claimed that such practices could potentially be further developed. Consequently, this leave room for further improvements.

Phase 5: Adopt/Scale vs Anchor Phase

Similarities

Similarities between activities in the Anchor phase in the conceptual CM model and the Adopt/Scale phase in the CM model at the case company refers e.g. to the scale-up of the deployment and development of e.g. products, solutions, services, tools or new ways of working to a broader array of stakeholders (*or change recipients, end-users, line-organizations or customers*). These activities are moreover advised to happen by e.g. starting small and then diffusing e.g. the new solution with incremental and partial deliveries. Simultaneously, are support and feedback mechanisms intended to be set up for use at the case company. Another similarity revolves around that the stakeholders and change recipients must have the ability to cope with an additional effort to learn and adopt the new solution or way of working. Lastly, both models also highlight the importance of continually updating the stakeholder, communications and risk management plan.

Differences

Aspects that are only contrasted in the conceptual CM model, refers to the evocation of a burning platform approach (*discussed above*), namely to continuously remind concerned stakeholders of the urgency and importance of the change, and accordingly that measures should be taken to make it difficult to do things the old ways. Additional differences refer to the importance of adjusting and reviewing the change process as initial planning assumptions might no longer be valid. Other CM-related activities and factors listed in the theoretical findings, concerns monitoring and evaluation of the acceptance and commitment of all stakeholders (*throughout the entire CM lifecycle*), and that actions should be taken accordingly. Yet another factor laid out by the theory concerns the assessment of whether the new solution or way of working has an organizational fit in the environment and culture it is being introduced in, and that actions should be taken accordingly to ensure a smooth transition into operations.

The importance of taking actions related to demonstrating commitment and endorsement to change throughout the whole change process is moreover only discussed in the conceptual model and in the lessons learned, and not in the current CM approach applied at the company. This aspect refers to the efforts of leaders to influence stakeholders felt need and willingness for change. Additionally, reviewing the change process both by internal and external experts is moreover only suggested by the conceptual CM model to gain potentially new and fruitful insights and thus eliminate biases from internal value tracking and follow-ups. The conceptual CM model also highlights the importance of retaining and rewarding influential management involved in driving the change and that the next generation managers continue to support the change.

Internal vs External Expert Reviews

Although there seems to be a wide consensus between the theoretical findings and the current CM strategy at the case company in regards to set-up of activities focusing on value tracking, monitoring and reviewing the change, the theory stretches further with the claim of also utilizing external experts to review the change strategy, status and process. Advantages with sticking to internal evaluation and reviews are many, under the assumption that the internal employees have necessary expertise.

For instance, can it be assumed that an internal review might be cheaper relative to an external one, as internal employees might possess in-depth expertise in particular tasks or processes, require less of an extensive amount of collaboration, which ultimately can allow them to assess relevant information quicker. Such an approach could moreover minimize potential miscommunication. There might however also be disadvantages with only relying on internal reviews. For instance, could biased internal expertise lead to operational ineffectiveness and blindness.

By contrast, external reviews can also come with both pro's and con's, if applied to the current CM strategy at the case company. Examples of benefits with an external review could potentially revolve around a high degree of objectivity as external experts might be distanced from the change process and employees might also be more willing to discuss issues with external experts rather than with internal managers. Furthermore, could external experts potentially offer new out-of-the box insights, skills or experience, as they might pay attention to e.g. ineffective tasks and processes that have previously gone unmeasured or unnoticed. Involving external experts to review a change process might however be costly, as well as require more resources, effort and collaboration. Also, the case company might also not be willing to expose sensitive project or business details to external experts. A solution could also be to utilize a mixed review-process consisting of both internal and external experts to gain the benefits of both parties.

Phase 6: Sustain/Evolve vs Sustain Phase

Similarities

In regards to similarities between the conceptual CM model and CM model at the case company, both highlights the importance of targeting the structures, systems, policies, processes, training, development and job roles, and furthermore ensure that these above mentioned aspects have an organizational alignment that fits the new organizational state, and if an organizational misalignment occurs, then actions are suggested to be taken to namely adjust, configure organizational incompatibilities and ultimately build congruence. Training programs and workshops are also something that are discussed both in the conceptual model and the CM model. Even though the company seems to be aware of the importance to target underlying structures and systems, a limited attention has been given to these aspects.

Differences

Significant differences that are only discussed in the conceptual CM model will be mentioned below. An example of this concerns establishing reward programs. This revolves around the creation of positive and reinforcing incentives, rewards and recognitions (*e.g. by incentivizing adoption, sharing success stories or praising stakeholders publicly*), that focus on influencing desired and reinforcing behaviors, actions and motivation of stakeholders, as means to secure adoption and institutionalization of changes, simultaneously as unfavored behaviors and actions should be somehow reprimanded or criticized.

The conceptual CM model also suggests continuing the communication of the change story (*the purpose and case for change)* throughout this phase (*in alignment with the burning platform principle discussed earlier*). The clarity and consistency of communication strategy is further recommended to be reviewed continuously (*also in the later and last phases of the change initiative*). Consequently, an adaptive approach to communication channels and the communication frequency should be applied.

According to the conceptual model, it is suggested that CM practitioners must also take into consideration that information must be communicated repeatedly throughout this phase (*same applies to the previous phase*) as it usually takes time before change recipients or stakeholders fully absorbs information. Moreover, communications and messages from top leaders and executives are considered to be advantageous and impactful.

Reward Systems

The empirical findings furthermore indicate that the reward systems have neither been addressed nor adjusted in-depth, although that theory implies that recognition, appreciation and rewards are effective means to realize successful CM. Therefore, further empirical research would come in handy to sort out uncertainties in this study, and thereby increase the validity in this reasoning. If the goals and outcomes of the change initiatives at the case company are not reinforced, then one could assume that stakeholders might also be less likely to fully adopt the changes consistently.

Therefore, under the assumption that organizations somehow get the behaviors and reactions they reward, the case company could possibly focus more on leveraging rewards and recognitions to enhance adoption rates. This might be highly relevant, as the goal for many of the projects in the transformation program appears to revolve around drive adoption, and therefore in this case adjusting reward systems could be a way to e.g. motivate change recipients, end-users or customers to realize desired behaviors, adopt and ultimately sustain changes.

A disadvantage with addressing reward systems can be that they can differ quite vastly across an organization (*and different functions and departments*), and furthermore that adjustments of rewards systems can be considered to be complex to manage especially in a global organization and centralized organization. Along a similar line, companies must also ensure rewards and recognitions are in line with compliance with rules, regulations and policies that govern HRM practices and additionally must be consistent with the organizational culture, norms, reactions and behavior that people are asked to embrace or follow.

A major challenge might also be that current reward systems reward stability (*current performance goals, business transactions, activities, processes or job descriptions*) more than (*new*) changes. The problem might be that rewarding stability (*with current reward programs*) might be somehow counter-productive, as this could cause friction and conflicts in the organizational transition between the current state and the future state. However when and if one attempts to adjust reward systems, then it could be wise to follow recommendations laid out by the theoretical findings, namely that rewards and recognition should aim to make employees feel valued and appreciated, using positive reinforcements that brings out the best in stakeholders. Additionally, it is suggested that rewards and recognitions should focus on creating emotional energy and authentic appreciation, as this can create positive willpower whilst reducing resistance to change. Conclusively, should recognition and reward programs not be approached as simply an afterthought, as theory implies it is an essential component of successful CM.

6.2 Analysis of the Lessons Learned

In the following section similarities and differences between theory and the identified lessons learned will be discussed and analyzed. Not entirely unexpected, the conceptual CM model stands out, as it stretches further and takes a broader set of CM factors, lessons learned and recommendations into consideration.

6.2.1 General Analysis and Discussion

It is important to point out that the empirical findings related to lessons learned and past experiences may not be entirely valid from a companywide perspective, as just a particular choice of managers and leaders has been selected and interviewed in this study. Moreover, are these interviewees likely to have provided insight about their particular social reality guided by the themes and topics asked by the researcher. Additionally, the interviewees might be biased towards the particular set of studied projects as well influenced by the particular sets of experience and perception related to the projects, they have been involved in.

However, based on the vast amount of similarities (*see appendix for an exact description of all the similarities and differences*), can it be concluded that a high degree of conformity exists between the lessons learned and the conceptual CM model, as most of the lessons learned, and past experiences coincides and overlap with the theoretical findings summarized in the conceptual CM model. This indicates a relative credibility to the findings, as they can be considered as both believable and appropriate in the context of this study. Apart from the high degree of conformity, might it therefore be reasonable to assume that these lessons learned can also be considered as positive contributing factors that could potentially lead to a contextual and relative improved CM practices if taken into consideration.

As mentioned above, can the full list of all the identified differences and similarities be found in the appendix. The similarities between the conceptual CM model and the lessons learned have not been analyzed and discussed in-depth in the last parts of the analysis, due to limitations of this study. Despite this, is it reasonable to state that the similarities have already been discussed and analyzed in an implicit and indirect manner. This is the case, because if there is a matching similarity between a particular lesson learned and a theoretical CM-related activity, aspect or factor, and simultaneously as the theoretical CM-related activity, aspect or factor in question already have been discussed in the previous section (*Theory vs Current CM strategy*), then that would mean that analyzing a particular lesson learned against a certain theoretical CM-related activity, aspect or factor (*that is already incorporated in the analysis of case company's current CM strategy*) can be assumed to not contribute to further insights or in-depth analysis.

Some significant findings however stand out. These concern learnings, claims and recommendations derived from the lessons learned. These differ completely from the theoretical findings (*see the conceptual CM model*), as they have not been explicitly included, stated nor discussed in the theoretical findings of this study, and therefore have these empirical findings (*lessons learned*) neither discussed nor analyzed against the current CM strategy applied at the case company. These aspects will be analyzed and discussed in-depth below.

6.2.2 Most Significant Lessons Learned Findings

Front-end Loading Methodological Approach

The theoretical findings highlight that a comprehensive pre-study is considered as essential in CM, as it allows one to reflect upon and develop in-depth understanding about all aspects of change. Thus, is it necessary for making good estimates and ensure effective CM practices. In comparison, and as acknowledged in the lessons learned, a front-end loading approach to pre-studies would improve the outcome of the entire change process. In-depth, as discussed by interviewees, a front-end loading is an interesting approach, because it could ensure an effective planning process, whilst improving the accuracy in decision-making as well as in resource allocation. Moreover, the front-end loading approach can be considered as helpful, as the ability to influence and adjust the CM plan in the initial phase and steps of any change initiative oftentimes are relatively high in the beginning, whilst the costs to make changes are relatively low.

For these reasons, it could be beneficial for the case company to take this into consideration, especially as some of the on-going projects can be characterized as being lengthy projects and high capital intensive. Two disadvantages with a front-end loading approach could be that relatively more resources and time needs to be allocated in an initial phase, in a period of time, in which the continuance of the project might be characterized by a high uncertainty. In such case, might a front-end loading pre-study be considered as a relatively costly and risky initiative, especially if the project would be terminated in an early stage. Another disadvantage refers to the risk of a sunk cost fallacy might occur. In such case, future decisions and initiatives might be biased and influenced towards the continuance of further investments with additional resources due to desires to prevent wasting already invested and unrecoverable resources, despite awareness of critical challenges and complexities.

In regards to implementing change in different contexts (*in different countries, market areas etc.*), may it be reasonable that underlying assumptions, such as internal and external drivers, coveted value, viability and feasibility of a project, key stakeholders, requirements and project specifications, or estimates of necessary skills and resources required to realize the change, might vary heavily dependent on market areas and particular customer units (*different cultures, countries, approaches, needs and demands*). This description might fit the organizational dynamics of the case company and the on-going transformation program. Especially as the case company is a global player that applies a centralized and matrix organizational structure. For these reasons, would it useful to conduct multiple and parallel pre-studies in accordance to where the change is intended to be implemented (*under the assumption that there are several end users, customers, stakeholder or receiving organizations with different needs and demands*).

Isolated Project and Change Work in Organizational Silos

A recurring phenomenon discussed by most of the interviewees in this study refers to that transformational projects have historically been conducted as isolated events or in organizational silos. This is important because in an era of transformation, the case company must adapt to a changing market and customer demands, much faster. Along a similar line, a slow pace, combined with working in organizational silos could potentially discourage effective project collaborations, and thus prevent the case company from staying both responsive and agile.

In this context, organizational silos refer to when projects are perceived to be managed in an uncoordinated business vacuum, without taking consideration to collaboration with the surrounding business environment and stakeholders. On the same topic, as result of project work in organizational silos, a collection of issues have been pinpointed by the interviewees (*from past projects and lessons learned*), ranging from decrease in employee motivation and morale, communication issues, increased amount of errors, unfavorable collaboration efforts, low transparency, waste and inefficiencies in resources and time, to duplication of efforts. Many have also emphasized positive advantages and the importance of breaking down organizational silos, although it is perceived to be somehow entrenched in the corporate culture and ways of working. This could possibly be explained in that the organization has applied a decentralized organizational structure in the past.

However, in recent times, efforts have moreover been taken on a companywide level to deal issues of breaking down organizational silos. This is evident in how the current transformation program and projects are organized with effective and cross-functional teams working to enhance visibility of the project work, having frequent meetings, continuous project work validation, project work conducted in nearby office spaces aiming to boost cross-functional collaborations, all in accordance to agile project methodologies. Despite this, a few respondents have perceived that some projects are still managed as isolated events.

Therefore, project work in organizational silos appears to be somehow entrenched, long-lived and difficult to deal with, even though an agile project methodology is currently applied. The perceived work in organizational silos (*causes issues such as lack of clarity, accountability or cumbersome processes*) might also be influenced by an organizational structure, which follows and incentivizes centralized and matrix-like business units and workplaces. Although the company tends to be aware of issues related to organizational silo, and its harmful effects on cross-team collaborations, can be considered to be well motivated to reflect and discuss the topic in-depth.

For instance, the perceived issues described by many of the interviewees could however be addressed and improved further, by clarifying delegation of tasks, comprehensive training and effective communications. Based on these assumptive recommendations, occurrence of multiple decision-making does not necessarily imply that overlap and conflicts are inevitable (*which could cause e.g. a perceived lack of involvement or clarity in expectations, decision making or reporting structures*). A combination of a matrix and centralized organizational structure might also influence to what extent managers and leaders perceive empowerment to make decisions and how stakeholder management is conducted.

Therefore, an improved and robust training system focusing on improving techniques in delegating work and motivating employees could potentially downplay disadvantages with the case company's organizational structure, and thus mitigate issues with work in organizational silos. Furthermore, as long as the outcome, deliveries and results of project work creates end-stakeholder value, might it be reasonable to assume that the project work is meaningful and effective, regardless of whether some perceive that the project work is conducted in isolation or not.

Improved communications could moreover minimize potential friction, confusion, resistance to change or other issues that derive from non-collaborative and isolated work conducted in what is perceived to be an organizational silo. For project and line organizations, the organizational structure also comes with advantages. For instance, could a centralized and matrix-like organizational structure allow for a stronger emphasis on important business issues, boost morale of employees, ensure more powerful decision-making (*with better impact*) to e.g. lower and middle level managers as well as the facilitation of fast decision-making.

Thus, an interesting conclusion could be that these aforementioned aspects are aligned with the case company's corporate culture (*to e.g. promote a speak-up environment and to execute speedily*). Based on the assumptions mentioned above, namely that organizational silos can hinder productivity, cause communication inefficiencies and turn employees into narrow minded thinkers, further conclusions that could potentially downplay harmful effects of organizational silo mentality occurring between e.g. project organizations and line organizations, refer to promoting a collaborative work environment, set up feed-back mechanisms that allow for a strengthened speak-up project culture in which recommendations and suggestions are more easy to review and potentially incorporated, clarification of leader and manager accountability and praise of contributions.

Sign-off, Agreement and Acceptance

Everything has a beginning and an end, and this might include and be true for both past and current projects. As laid out by most of the interviewees, the planning, actual agreement and signoffs with e.g. key stakeholders, change recipients, line organizations or customers have been considered as vital in past projects and are also considered as important in current on-going projects. In this context, signoffs do not simply refer to closing a project and in such way simply declaring that the job is complete. Surprisingly, this is not clearly outlined or discussed in the theoretical findings. This might have to do with that project, stakeholder and communications management have not been studied in depth and not highlighted in the identified CM frameworks and models (*under the assumption that signoffs might be more emphasized in these research disciplines*).

The interviewees have moreover pointed out that agreements and clarification of sign-off procedures focusing on e.g. project scope, expectations, resources, roles, goals and KPIs as critical aspects that must be addressed, continuously adjusted and agreed upon, throughout the whole lifecycle. Some interviewees have described that both formal and informal sign-off practices help to build trust and oftentimes allows smoother deployments and help change initiatives to stay on track (*to success*). Additionally, could a formal sign-off somehow protect and bridge vested interests, and ensure a common and detailed understanding of e.g. obligations and project specifications.

Consequently, this could assure that stakeholders take responsibility to fulfill their obligations. In such way could accountability of leaders, managers, change recipients, customers or other stakeholders furthermore be boosted. In line with reward, recognition and reprimand systems, could implications of these also spark further attention and incentives among the stakeholders to support the development and deployment of a change initiative all the way through, and in such way institutionalize changes.

Additionally, as mentioned by many of the interviewees, if attention has not been given to especially formal sign-off procedures, then that has many times resulted in that different stakeholder groups are getting lost in detailed discussions, memory loses/differentiations, made up assumptions or overlooked issues, disagreements or conflicts. In regard to uncertainties with a change initiative, could it be risky to assume that simply a generalized agreement would be either enough or suitable.

On the contrary, could this result in unwanted effects, such as misunderstanding, doubts and distrust. If one assumes that every stakeholder group is different, and that a set of different formal and informal signoffs are carried out, then that could facilitate a comprehensive and enhanced motivation and trust in the change initiative for each stakeholder group. This could however also result in a time-consuming situation, where one gets lost in detail, as an example of a disadvantage. Therefore, should one instead strive for a relative and manageable balance.

Conclusively, a set of specifically drafted stakeholder agreements or sign-offs should be carried out for each stakeholder group (*and if resources are limited, then it would be reasonable to mainly focus on key stakeholders*) with multiple deliveries, so that one can build strong and fruitful relationships with stakeholders. Moreover, could a positive outcome of sign-off procedures ultimately incentivize and promote involved stakeholders to also address and solve underlying complex and critical issues that need to be handled in order to ensure the success of a change initiatives.

7. Conclusion

In this chapter, the main results and points are unrolled, explained, and concluded. Thus, the output and conclusions of the entire study are summarized in relation to the problem statement, research gap, the purpose, and research questions. Furthermore, are contributions to research, practical implications, sustainability, and recommendations on future studies concluded.

7.1 Reconnect to Research Purpose

The research purpose of this study has been to investigate, clarify and understand what CM-related activities and factors might contribute to bridging the gap between practice and research. The results show that no single CM model on its own, is covering the plethora of activities and factors related to CM practices needed to achieve and manage change in a comprehensive, detailed, and systematic manner. Hence, a conclusion and recommendation is that researchers and practitioners should put more emphasis on incorporating, bridging and organizing multiple CM models into simplified, meaningful and systemic approaches to cover as many essential CM-related activities and factors as possible, and thus support and potentially improve CM practices, throughout the entire CM life-cycle from a state of aspiration to a state of complete institutionalization and realization of change impact.

Accordingly, an outcome of this study is a proposed conceptual CM model, which includes six sequential phases and four parallel activities. Additionally, has the conceptual CM model served as a theoretical frame of reference to identify and clarify differences and similarities with CM practices at a case company. The identified differences that are analyzed and discussed in detail in the previous chapter are furthermore assumed to be activities and factors that could help bridge the gap between CM theory and practice. These activities and factors are summarized later in this chapter.

Important to point out and in line with what some researchers have imprecisely claimed, a limited set of empirical evidence has been provided to support the CM frameworks and models. Therefore, this study has aimed at identifying, clarifying, comparing, and analyzing CM-related activities and factors between practice and research, in a clear and detailed manner. To fulfill such aim, a two-folded case study has been applied. This case study has focused on lessons learned and a current CM strategy. The results show that there are actual gaps between CM practice and research.

In summary are all these gaps (*distinguishing activities and factors*) which might improve CM practices and strategies, listed in the remaining parts and sections of this study. Additionally, could further research focusing on these activities and factors complement and strengthen the identified gaps, inadequacies, and weaknesses in this study. In such a way, could the alleged gap between CM practice and research potentially be bridged.

7.2 Answers to the Research Question

Below are the most significant CM-related activities and factors summarized.

7.2.1 Findings and Recommendations Related to the Research Gap

Conceptual CM Model

In the process and creation of the conceptual CM model, a research gap has been identified. This gap refers to that none of the identified models being considered fitting the characteristics of being a descriptive and group dynamic model. While descriptive models refer to loosely, inter-linked, and high-level organizational elements and factors, group dynamic models refer to models addressing effective transitions of teams or groups of people. This gap can be explained with that a model with the characteristics of both descriptive models and group dynamic models tend to be presented and interpreted as vague and overarching, without no obvious start or end. Such a model (*with banal and high-level organizational elements*) can also be interpreted as difficult to comprehend and ambiguous regarding usability.

Consequently, has the author not found and interpreted any of the identified 50 models to fit such characteristics. This can in conclusion be explained with one of two possible explanations. One explanation might be that the author has either been biased or inattentive in identifying an in-depth understanding of CM models and therefore missed out on CM models that could fit the characteristics of being a descriptive and group dynamic model. Another explanation refers to that there is an actual gap in the CM literature. This calls for further investigation to confirm and validate this reality of this aforementioned gap.

Lessons Learned

The lessons learned show that a considerable overlap, as multiple activities and factors coincides with, and can be interpreted to be similar to the theoretical findings outlined in the conceptual CM model. The similarities provide credibility to the identified lessons learned in this study. Therefore, can it be interpreted as a limited or a minor gap exists relative to identified CM-related activities and factors, whilst the conceptual CM model stretches further and covers more aspects than the identified lessons learned. Despite the factors listed in the conceptual CM model, some findings related to the lessons learned stand out and differ significantly. These are:

• *The application of a front-end loading approach and assigning resources to conduct a detailed pre-study for multiple stakeholders (such as end-users, customers and market areas).*
• *Planning for and reaching multiple formal and informal agreements and sign-offs with key stakeholders regarding multiple project aspects throughout the entire CM life-cycle.*
• *Putting more emphasis on, and avoiding the appearance of planning and managing change in isolation or in organizational silos. Instead enhance and promote transparency, openness, collaboration.*
• *Establish reward systems that particularly incentivizes stakeholders to both institutionalize changes in a long-term perspective, whilst encouraging leaders and managers to address and solve underlying complex and critical issues that need to be handled in order to ensure long-term success (avoid narrow focus on low-hanging fruits).*

Current CM Strategy

Similar to the identified lessons learned, the findings related to the current CM strategy at the case company shows a considerable overlap as multiple activities and factors coincide with, and can be interpreted to be similar to the theoretical findings listed in the conceptual CM model. The similarities provide credibility to the current applied CM strategy at the case company, as it can be interpreted that only a minor gap exists. Regarding the current CM strategy, distinguishing factors and findings that have not been found in the conceptual CM model, refers to:

• *The current CM strategy is closely linked to, and interwoven with PM practices. In contrast to the identified CM models, no model has clearly highlighted dependencies and implications on PM, and vice versa, implications of PM on CM practices, although some researchers claimed that there are similarities between PM and CM.*
• *Thus, have influences and implications of agile PM methodologies on CM practices been identified.*
• *Involvement of an internal communications department to develop and spread information of change initiatives, and thus strengthen the coordination of communications (related to CM).*
• *The use and application of local, situational and contextual adaptations related to CM practices within dozens of projects in a business transformation program. This finding contributes to the CM research with new insights and understanding, as some researchers have previously claimed, namely that there is a need for investigating situational and contextual CM approaches and methods to manage change.*
• *A combinational use of a Burning Desire and a Poke-Yoke approach, instead of using a Burning Platform approach (as it is considered to be inappropriate to achieve positive reactions and long-term impact, ineffective as it might trigger unfavorable reactions).*

More on the Need of Local, Situational and Contextual CM Approaches

In accordance with the problem statement highlighting the need of local, situational and contextual CM approaches, as well as further investigation and understanding of critical factors that contribute to successful CM practices, the influences and implications of agile PM methodologies on CM practices are concluded in-depth below.

In line with the results, analysis and discussions, CM models and frameworks dedicated to the influences and implications of agile PM approaches on CM practices are limited based on the literature study. In this regard, is it possible that a gap exists between CM practice and research worthy of further investigation, as the case study implies that agile approaches to PM are commonplace at the case company (*and possibly also in the ICT industry).*

The conclusion is therefore that none of the identified CM models were directly associated or aligned with PM methodologies. Further conclusions imply that dedicated research highlighting the influences of agile PM on CM practices is non-existing, according to the theoretical foundation in this particular study. In conclusion, this might be due that the research on agile CM practices is limited or possibly in its infancy.

Other conclusions refer to that most CM models and frameworks typically employ a step by step, linear and processual approach, in which common CM practices often are initiated with a formulation and development of a future state and purpose, stakeholder mapping, communications strategy, change readiness plans and activities, simultaneously as new products, solutions, services, tools or ways of working are developed, and deployed in a somehow linear and sequential manner, in contrast to agile PM methodologies.

From this perspective, could agile PM approaches influence and contribute to CM practices with new insights on how to adapt and manage change in more agile and flexible ways. In accordance with the analysis and discussion, minimum viable products, tools, solutions or agile ways of working could potentially be accomplished, validated and deployed long before the initial steps of traditional CM approaches and practices are complete. Subsequently, could traditional CM practices be considered as to somehow be complicated, late, inaccurate and slow, in comparison to agile approaches.

Consequently, might this gap between research and practice be explained and well-motivated, e.g. as sequential and traditional approaches to CM might have been well-suited in regard to the corporate culture, old ways of conducting PM and analogue approaches to business operations. In the context of case study, the case company is experiencing a digital, dynamic and unpredictable business environment with an increasing introduction of new digital technologies, solutions and products, in combination with new or changing customer demands and needs, an increasing competition and opportunities to conduct business operations in new, different and faster ways.

Thus, might pre-planned traditional and sequential approaches to CM might not be enough, e.g. as it might be considered difficult to predict, stop the project requirements from changing, or cutting corners to get the project done whilst meeting tight deadlines, in this highly dynamic and competitive business environment.

7.2.2 Findings and Recommendations Related to the Gap in the Praxis-Field

Current CM Strategy

Other results show that CM-related activities and factors found in the identified conceptual CM model have not been addressed thoroughly in the current CM strategy at the case company. These refers to:

• *Make use of and leverage corporate culture to support change initiative.*
• *Support and facilitation of HRM practices to enhance CM practices.*
• *An extensive use of individual behavioral CM frameworks and models.*
• *A clear differentiation between PM and CM goals, and implications of this on CM practices.*
• *Further use of both qualitative and quantitative communications, benefits and results (e.g. more emphasis on feedback, surveys and reviews regarding customer and employee journeys and satisfaction).*
• *Develop processes related to organizational learnings (e.g. to gather and make use of lessons learned) and furthermore to utilize long-lasting feedback mechanisms as means to achieve sustainable business impact.*
• *Use of a Burning Platform approach (direct contradicting to the burning desire and poka-yoke approach).*
• *Potential improvement areas related to the communication of change. E.g. to apply and make use of continuous communications targeting the case for change (with an organizational-wide and coherent story), and an extensive use of success stories (focusing on early adopters and visualizing early successes among a wide variety of stakeholder).*
• *Utilization of both internal vs external expert reviews.*
• *The use of reward and recognition system to institutionalize change.*

Comparison and Gap between the Current CM Strategy and the Lessons Learned

This study also reveals that a gap exists between the current CM strategy and the identified factors from the lessons learned. This gap shows that the case company has not taken some activities and factors from past experiences and lessons learned into consideration into the new projects. In practice, such a comparison can provide the case company with organizational learnings and actionable insights might improve the outcome of future change efforts. These refers to:
• *Establish reward systems that particularly incentivizes stakeholders to both institutionalize changes in a long-term perspective, and to address and solve underlying complex and critical issues that need to be handled in order to ensure long-term success (avoid narrow focus on low-hanging fruits).*
• *Develop and use lessons learned, long-lasting feedback mechanisms combined with more emphasis on long-term attention and commitment (e.g. long after a project has been completed).*
• *Avoid planning and management of change in isolation or in organizational silos. Instead enhance and promote further involvement, transparency, openness, collaboration (this might be apparent when dedicated agile teams work in isolation without irrespective of whether value is created and discussions around final outcomes rather than specialized focus on technical project developments)*
• *Apply continuous communications that addresses and strengthen the case for change (a wide, organizational and coherent story, success stories, early adopters and early successes.*

7.3 Sustainability

The section below includes the author's remarks regarding sustainability and possible implications of CM failures and wasteful efforts.

Many researchers are arguing that applying CM practices in a meaningful and sustainable manner is difficult, as there exists a myriad of literature describing failures. The alarming low success rates can furthermore be interpreted as CM practices are ineffective and could potentially be improved. Thus, the CM discipline needs further research. Equally important, any failure can be interpreted and described as wasteful efforts from an academic standpoint, a leader- and management standpoint, a social standpoint, a technological standpoint, and from an economic standpoint.

Regardless of the many reasons why change initiatives fail, the lack of sustained change is not only costly but could also lead to a plethora of negative consequences for any organization. For instance, could perceived failures or unsatisfactory results initiate potentially downward and negative spirals which could lead to change fatigue and risk-averse stakeholders (e.g. customers, employees, leaders or managers) and ultimately unsatisfactory results (e.g. low adoption rates, ROI or unfavorable behaviors and reactions such as fear, confusion, anxiety, and disbelief in change initiatives). Alternatively, could a negative spiral (*e.g. originated from a history of failures*) both discourage and hinder stakeholders (*e.g. project leaders or change leaders*) from being equipped with enough capacity and resources to conduct proper and systematic CM practices (e.g. in either current or future projects) in relation to the proposed conceptual CM model and conclusions in this study, as means to manage the full life-cycle of change in an effective, sustained and successful manner.

To put matters in perspective, the international peace and security organization United Nations (UN) is advocating a global agenda called the Sustainability Development Goals (SDGs) as a call to action to achieve a better and more sustainable future for all. This global agenda consists of 17 goals and targets focusing on a wide variety of target areas (UN, 2020). Out of these 17 areas, are SDG 8 (*Decent work and economic growth*) and SDG 9 (*Industry, innovation, and infrastructure*) particularly relevant when it comes to the implications of CM practices. The relevance of CM on these SDGs can be exemplified in the ongoing transformation program at the case company. Such transformation program contributes namely to the employment of e.g. CM practitioners, which in turn aims to facilitate higher levels of productivity, adoption of technological innovation, and thus economic growth. In such a way could CM-facilitated growth and development indirectly promote organizational and technological progress. In contrast, could consequences of wasteful CM efforts at the case company eventually lead to an inability to reach its vision and mission, to empower an intelligent, sustainable and connected world by providing equipment, technology solutions and services for networks and mobile communications.

7.4 Future Studies

After all the analysis and conclusions of this study is not the end of the story. Therefore, further studies will be recommended next. Under the assumption that CM practices are impacted by agile PM methodologies and that CM practices have to mirror the rationale of agile PM methodologies (*in regards to e.g. stakeholder and communications management, interactions, participation and collaboration, development and deployment of a particular product, solution, tool or new way of working*) is it motivated to dedicate further studies to enhance understanding in potentially new effective ways to conduct CM. Conclusively, is it recommended to address further investigation to:

- *Conduct a similar study as this one but take a broader array of interviewees into consideration.*
- *Study to what extent a CM strategy and practices can be influenced by an agile PM approach.*
- *Investigate how CM practices could be incorporated to support agile projects, with a fit-for-purpose approach.*
- *Study if there is a need for a flexible and agile CM approach and practices as means to support an agile project organization.*
- *Investigate how a flexible and agile CM approach, model and framework could be formulated and defined.*

Other aspects that have not been investigated in-depth this study, but which might be interesting and yet relevant to study as means to increase the generalizability refers to:

- *Investigate cross-cultural CM from a global leadership and management perspective.*
- *Investigate CM in relation to corporate culture, stakeholder and communications in-depth.*
- *Investigate influences of Toyota Production System and Lean Management principles and techniques on CM practices (e.g. the Poka-Yoke or the Genchi Genbutsu principle).*
- *Study long-term follow ups of change impacts and thereby assess actual benefit realization.*
- *Investigate in-depth the process of how lessons learned are taken into consideration (from e.g. collection to transfer) and thus the influences, benefits and effects on CM practices of doing so among a broader array of organizations.*

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9. Appendix

Theoretical Change Management Models & Frameworks

Table 3. Systematic categorization of identified theoretical CM frameworks and models

#ID	Model	Typology	Core idea	CM-related activities, aspects, enablers, factors and guidelines	Sources
1	Lewin's 3-stage model.	Group dynamics. Processual model.	Take a group of people to a new state of equilibrium.	Unfreeze: define the current state, establish a vision and plan, as well as the driving and restraining forces. Transition: execute change plan, while ensuring participation, involvement and behavioral changes. Refreeze: consolidation the change efforts, ensure alignment to new organizational structure and system.	Brisson-Banks, 2010; Al-Haddad & Kotnour, 2015; Voehl & Harrington, 2017; Stouten et al., 2018; Cameron & Green, 2019
2	Bullock & Batten's 4-phase model.	Group dynamics. Processual model.	Emphasizes reflection and awareness, detailed plans, integration and alignment	Exploration: show awareness of needs, reflect on the necessity of the change initiative, secure necessary resources early. Planning: diagnose current situation, collect data to make detailed plans, set goals, all in a collaborative manner, which finally should signed-off by the management and key stakeholders. Action: execute plans, accordingly, allow review and feedback mechanisms and also plan for adjustments if things go off-track. Integration: when activities concerning development/implementation activities are completed, it's time to initiate integration and alignment activities such as policy, standards and reward systems.	Rosenbaum et al., 2018; Kraft et al., 2018; Cameron & Green, 2019
3	Kotter's 8-step model.	Group dynamics. Processual model.	Gain buy-in early, implement a holistic change approach and avoid typical mistakes.	Establish urgency. Form coalition. Create vision. Communicate vision. Empower others. Plan and create short-term wins. Stay persistent. Institutionalize approaches.	By, 2005; Al-Haddad & Kotnour, 2015; Voehl & Harrington, 2017; Löthman, 2017; Sætren & Laumann, 2017; Cameron & Green, 2019
4	Beckhard's 4-step model.	Group dynamics. Processual model.	Long-range and top-down approach planned and interlinked interventions.	Set goals and define desired future. Diagnose current situation. Define the transition. Develop strategies and actions.	Brisson-Banks, 2010
5	Hayes model	Group dynamics. Processual model.	Change must be purposeful and managed. Involves steps that are logically sequenced. Steps such as diagnosis, people issue and learning can be addressed more than once and occur simultaneously.	Recognize needs. Diagnose needs and formulate vision. Plan interventions. Implementing plans and reviewing progress. Sustaining the change. Lead and manage the people. Gather learning.	Vanqa, 2006; Hayes, 2018
6	ACMP's Standard for Change Management	Group dynamics. Processual model.	Structured approach to enhance change management practice ability, quality and credibility.	Evaluate change impact and organizational readiness. Formulating strategy. Develop plans. Execute. Closure of change efforts.	ACMP, 2014; Rosenbaum et al., 2018
7	Kanter et al.'s Ten Commandments for executing change	Group dynamics. Processual model.	Builds on the premise that change is multi-directional, ubiquitous and takes into consideration guiding principles for handling internal and external forces.	Analyze the need for change. Create shared vision and common directions. Separate from the past. Clarify urgency and importance of change. Support a strong leader role and change legitimacy. Line up political sponsorship to create a solid base for change. Craft an implementation plan. Develop enabling structures to help implementation with pilots, tests, training and reward programs. Communicate openly with and involve all stakeholders Reinforce and institutionalize change and new behaviors in day-to-day operations.	By, 2005; Cheung et al., 2010; Al-Haddad & Kotnour, 2015; Stouten et al., 2018
8	Galpin's 9-step wheel model	Group dynamics. Processual model.	Addresses the importance of understanding corporate culture and soft elements in change processes.	Establishing the need to change. Developing and issuing a vision of a planned change. Diagnosing and analyzing the current situation. Generating recommendations. Detailing the recommendations. Pilot testing the recommendations. Preparing the recommendations for rollout. Rolling out the recommendations. Measuring, reinforcing, and refining the change.	Alas, 2004; Cheung et al., 2010
9	Hiatt's ADKAR model	Group dynamics. Processual model.	The purpose of the model is to build change capability while engaging people throughout its five stages. The model addresses change at the scale of the individual and helps people to serve as ambassadors of the change.	Awareness of the need for change. Desire to take part and support the change. Knowledge on how to change. Ability to implement required skills and behaviors. Reinforcement to sustain the change.	Voehl & Harrington, 2017; Stouten et al., 2018; Rosenbaum et al., 2018

10	Persuasion Campaign: 4-stages	Group dynamics. Processual model.	The persuasion campaign aims at anchoring change and revolves around communication tools and actions by convincing employees, framing a plan, managing employees and reinforcing behavioral guidelines.	Prepare the cultural "ground" months before setting change plans in concrete, by convincing employees that your company can survive only through radical change. Present plan by explaining its purpose, expected impact and help people interpret ideas correctly, by creating the framework for change. After executing the plan, manage stakeholders and employees' emotions, while keeping people focused on the hard work ahead. As the turnaround starts generating results, reinforce desired behavioral changes to prevent backsliding by preventing backsliding.	Garvin & Roberto, 2005
11	Beer et al.'s 6 step for change	Group dynamics. Processual model.	Emphasizes task alignment, by reorganizing employee roles, responsibilities, and relationships. Includes building commitment for change through involvement, developing shared goals. The model encourages small changes that allow individual learning and can reduce the resistance to change.	Mobilize commitment to change through joint diagnosis of problems. Develop a shared vision of how to organize for competitiveness. Foster consensus for the new vision, competence to enact it, and cohesion to advance it. Spread revitalization to all departments, without pushing from the top. Institutionalize revitalization through formal policies, systems, and structures. Monitor the revitalization process, adjusting in response to problems.	Beer et al., 1993; Al-Haddad & Kotnour, 2015; Stouten et al., 201
12	Tipping point leadership: 4-step process	Group dynamics. Processual model.	In any organization, once the beliefs and energies of a critical mass of people are engaged, conversion to a new idea will spread like an epidemic, bringing about fundamental change very quickly. The purpose is to achieve a rapid, dramatic, and lasting change with limited resources.	Break through the cognitive hurdle and make key managers experience the real and actual problems in the organization. Mitigate the resource hurdle and instead concentrate resources on areas most needing change. Move beyond the motivational hurdle by motivating key influencers. Knock over the political hurdle and identify and silence key naysayers early by putting respected seniors on the change team.	Kim & Mauborgne, 2003
13	Luecke's 7-step model	Group dynamics. Processual model.	Stresses the importance of accepting the need and urgency for change. View change as an opportunity allows it to succeed and sink deeply within the organizational culture. Addresses strong leadership in supporting change and motivating employees to accept change. Also addresses different reactions of people allows managers to help people accept change.	Mobilize energy through joint problem identification. Develop a shared vision. Find the leadership and leaders. Focus on results. Start in the periphery. Institutionalize success. Monitor and adjust strategies.	Luecke, 2003; By, 2005; Cheung et al., 2010; Al-Haddad & Kotnour, 2015
14	Change Activation Toolkit	Group dynamics. Processual model.	Highlights the importance of leadership empowerment and helps to design a context-sensitive approach to change.	Leading change. Creating a shared need. Shaping a vision. Mobilizing commitment. Making change last. Monitoring progress. Changing systems and structures.	Voehl & Harrington, 2017
15	Accelerating Implementation Methodology	Group dynamics. Processual model.	Practical guide to manage change, overcome employee and cultural barriers. Emphasizes an integrated set of operationalized principles to accelerate change readiness.	Define the implementation. Generate sponsorships. Build change agent capability. Develop target readiness. Communication. Define the reinforcement strategy.	Voehl & Harrington, 2017
16	Beckham & Harris Model	Group dynamics. Processual model.	Emphasizes a considerable attention to management mechanisms, the development of activity plans and gaining commitment from key stakeholders.	Establishing the need for motivating change. Building the change team. Creating a shared vision. Communicating and developing political capital and support. Managing the transition by noticing improvements and energizing others. Sustaining momentum by consolidating the gains.	Voehl & Harrington, 2017
17	Change Acceleration Process	Group dynamics. Processual model.	The lack of attention to cultural factors and people's side often derail projects, not the technical aspects or strategy.	Leading Change: ensure commitment. Creating a Shared Need: need for change must outweigh resistance. Shaping a Vision: clear and legitimate vision. Mobilizing commitment: build momentum with early adopters and pilots. Making Change Last: leverage early wins and transfer learnings to a broader rollout. Monitoring Process: measure progress and clarify accountability. Changing Systems and Structures: adjust systems to support the new state, job roles and behaviors.	Voehl & Harrington, 2017
18	People-centered implementation model	Group dynamics. Processual model.	Engage people in the change process, following the six critical success factors. Creates an environment of sustained change. Enables change leaders and project teams to deliver sustainable change.	Effective change leadership. Powerful engagement processes. Committed local sponsors. Strong personal connections. Sustained personal performance. Shared change purpose.	Voehl & Harrington, 2017
19	Harrington-Voehl's SUSTAIN model	Group dynamics. Processual model.	Consists of seven enablers for creating a sustainable change environment in the organization. Ensures that there is consideration of the day-to-day operational consequences of the change at hand and a valid reason for making change.	Start at the top. Use and create an engagement/enrolment plan. Shift paradigms when needed. Talk and communicate the challenges, Assimilate and integrate rewards and consequences. Invest in risk analysis, project planning, measurement and reporting for sustained results. Negotiate risks with a portfolio approach and standardize change management approach.	Voehl & Harrington, 2017
20	Lippitt's Change Model	Group dynamics. Processual model.	Consists of seven consequential steps. Focuses more on the role and responsibility of the change agent than on the evolution of the change itself. Assumes that a change strategy should be developed continuously throughout its lifecycle.	Diagnose the problem. Assess the motivation and capacity for change. Assess the resources and motivation of the change agent, which includes the change agent's commitment to change, power, and stamina. Choose progressive change goals and develop action plans. The role of the change agents should be selected and clearly understood by all parties so that expectations are clear. Maintain the change with communication, feedback, and group coordination. Change	Kritsonis, 2005; Vanqa, 2006; Al-Haddad & Kotnour, 2015

				agents should gradually withdraw from their role over time and when the change becomes part of the organizational culture.	
21	Cummings and Worley's 5-step model	Group dynamics. Processual model.	The model revolves around five guiding steps that focus on obtaining effective change management practices.	Motivating change, includes creating readiness for change and helping the change recipient's address resistance to change. Creating a vision, is a leadership task where the leaders are to create the 'why' and 'what' of the upcoming change. Developing political support, the leaders need to gain employees' support to implement the change and avoid individuals and groups from blocking it. The management needs to create an activity plan for the change activities. In addition, it is the management's task to plan how to keep the employees committed and to build a management structure to guide the organization through the planned change. Sustaining momentum includes providing resources for change, building a support system for change agents, developing new competencies and skills, reinforcing new behaviors, and staying the course to complete the change process.	Alas, 2004; Sætren & Laumann, 2017
22	Anderson and Anderson's 9-step model	Group dynamics. Processual model.	Addresses all kinds of organizational changes and provides strategic options for targeting challenges that might arise during change processes.	Prepare to lead the change. Create organizational vision, commitment and capability. Assess the situation to determine design requirements. Design the desired state Analyze the impact. Plan and organize for implementation. Implement the change. Celebrate and integrate the new state. Learn and course correct.	Vanqa, 2016; Anderson & Anderson, 2001
23	HSE's framework	Group dynamics. Processual model.	Focus is on an operational level and supplies a three-step framework which each are broken down into five sub-steps. Focuses on people and cultural aspects of change management and the importance of leaders.	The first step (getting organized for change) includes having a strong policy for managing organizational change, making senior-level managers accountable and demonstrating a clear commitment to safety by their actions, having a clear change-management procedure, communicating and including everyone and reviewing and challenging the process both by internal and external experts. The second step (assess risks) involves identifying the people involved including those in the existing and proposed organizations that will be affected, identify all changes because complexity could be a hazard and in larger organizations simultaneous changes could hinder smooth processes, assess the risks within the change process, consider human factors, competence and workload and test scenarios that are realistic and structured to prepare for incidents and emergencies. The third step (implement and monitor the change) involves providing adequate resources to make the change , monitor risks during change, keep the plan under review and track actions, monitor performance after change and be ready to change or reverse decisions if significant risks are discovered and lastly review the change policy to amend the organization's change procedures.	Alhashimi, 2015; Sætren & Laumann, 2017
24	Pendlebury et al.'s 10-step model	Group dynamics. Processual model.	Targets a dynamic set of critical success factors for achieving successful change processes.	Define the vision, set up the high-level plan. Mobilize, create an environment for change. Clarify details in the plan and how it will support and facilitate the change. Carry out the action plan and implement changes. Alter structures, methods, attitudes and corporate culture and produce quantitative and qualitative results. Ensure participation of people affected by change. Focus on emotions to overcome resistance and mental blockages. Handle power and align power relations with the vision so that they contribute positively to the change process. Coach and provide training in both technical and interpersonal skills, to help people maximize their contribution to the change process. Actively communicate to encourage participation and involvement.	Teczke et al., 2017; Pendlebury et al., 1998
25	Connor and Patterson's model	Individual behaviours. Processual model.	The model represents how the maturity, commitment and level of support varies with time. People go through different stages which can be categorized into the following phases: preparation, acceptance and commitment.	First contact: no awareness, something is changing. Awareness: no understanding and confusion. Understanding: negative perception. Positive perception: inaction or rejection. Adoption: institutionalization fails. Internalization: commitment realized.	Conner & Patterson, 1982
26	Yukl et al.'s commitment model.	Individual behaviours. Descriptive model.	This model targets specific leadership behaviors. It focuses on crucial aspects to address to achieve effective leadership. These are divided into three dimensions, namely tasks, relations and change behaviors.	Task-oriented behaviors: Clarifying roles. Monitor operations. Short-term planning. Relations-oriented behaviors: Consultation. Support. Recognition. Development. Empowerment. Change-oriented behaviors: External monitoring. Encourage innovative thinking. Take risks for change. Envision change. Empowering responsibility.	Ford et al., 2014; Yukl et al., 2002
27	Kotter and Schlesinger's Change Strategy	Individual behaviours. Processual model.	Focuses on diagnosing types of resistance change initiatives might encounter, tailoring the countermeasures accordingly and to adapt change strategies to the situation.	Analyze situational factors. Determine the optimal speed of change. Consider approach or methods for managing resistance; Education & Communication, Participation & Involvement, Facilitation & Support, Manipulation & Co-option, Negotiation & Bargaining, Explicit & Implicit Coercion.	Kotter & Schlesinger, 1979
28	Bridge's 3-stage transitional model	Individual behaviours. Processual model.	Focuses on enhancing understanding of what goes on during a transition, how to manage this process more effectively and provides insights on how to overcome emotional barriers to change without getting stuck.	Ending: mark the ending and new start. Identify who is losing, what reactions to expect. Repeat information about what is changing, as it will take time to sink in. Neutral zone: prepare for and expect that people will feel disoriented, motivation falls and a rise in anxiety. don't ignore people when they complain, make sure people are not hanging on too much of the past and increase the felt need for change. provide opportunities for creative thinking and acting. New beginning: gain commitment by emphasizing the purpose behind the change, picture how the new organization will look and feel, provide a stepwise plan for how to get there and invite them to play a part in the new organization.	Brisson-Banks, 2010; Voehl & Harrington, 2017; Hayes, 2018; Cameron & Green, 2019

29	Kubler-Ross 5-stage Change Curve	Individual behaviours. Processual model.	People go through a dynamic and psychological process during changes. Recognizes stages or reactions to change and provides insights into interventions.	Shock or surprise. Denial, fear, and disbelief: create alignment. Frustration, anxiety, anger and recognition that things are different: maximize communication. Depression, hostility, or low mood: spark motivation and provide emotional support. Experiment, struggles, initial engagement with a new situation: develop capabilities. Decision and learning how to work in the new situation: share knowledge. Integration of changes and reviewed individuals: increase morale and competence.	Wright, 2009; Rosenbaum et al., 2018; Cameron et al., 2012
30	Appreciative Inquiry: 4-D cycle	Individual behaviours. Processual model.	Addresses attention to change recipient participation and emphasizes that change must be framed as a positive opportunity for improvement through enthusiasm. Generates a collective image of a new and better future by exploring the best of what is and has been.	Define a positive and affirmative topic. Discovery: appreciate "the best of what is", conduct inquiry into the topic and assemble learnings. Dream: generalize learnings, imagine and innovate "what might or could be". Design: determine and build "what should be" based on the generated hypotheses. Destiny: create appropriate, build momentum and deploy "what will be".	Bushe, 1995; Ludema et al., 2006; Stouten et al., 2018
31	Judson's 5-phase model	Individual behaviours. Processual model.	Built on the premise that the resistance to change is the biggest barrier in any change initiative. The model revolves around understanding implications of changes and offers insights for minimizing unfavorable employee reactions to change interventions.	Analyzing and planning the change. Communicating the change. Gaining acceptance required changes and new behaviors. Making the transition and changes from the status quo to a desired state. Consolidating, institutionalizing and follow-up on the new conditions and state.	Armenakis & Bedeian, 1999; Cheng et al., 2010; Al-Haddad & Kotnour, 2015; Stouten et al., 2018
32	Prochaska and DiClemente's 6-step model	Individual behaviours. Processual model.	The model defines a cyclical and general process of behavioral change, as people pass through a series of stages when changes occur.	Changes lead to a movement in behaviors/reactions, from (1) precontemplation to contemplation, when an individual is unaware or fails to acknowledge the problems without engaging in any change process activities. Contemplation (2) is when individuals raise consciousness of the issue and are thinking about changing their behavior, but they are not ready to commit to change yet. Preparation (3) occurs when individuals are ready to change their behavior and plans to do so within weeks. These individuals will need counseling, social support, and assistance during this stage. The action stage (4) is characterized by an increase in behavioral change as individuals begin to engage in change activities. Maintenance (5) stage concerns actions to reinforce the change. Relapse (6) stage concerns individuals that fall back into old patterns.	Kritsonis, 2005
33	Theory U	Individual behavior. Processual model.	Provides points of reference to tap into a collective capacity by managing an individual's way of thinking, behaviors, emotions and reactions. The model is a U-shaped model that helps people to transition from old ways of working, unproductive patterns of behaviors, to adopt new and desired ones.	Co-initiate: slow down and listen to others. Co-sensing: observe and initiate change in those areas with the most potential. Presence: Clarify purpose, link the change to the source, and get the threshold onboard. Co-create prototype new ways to explore the future and accelerate change. Co-evolve: Embody changes in the organization and facilitate active and action-based participation of stakeholders.	Sohmen, 2016
34	Johnson's cultural web	Open system. Descriptive model.	Used to understand and align organizational culture, strategy and change initiatives. Can be used to map both existing culture and future culture. A comparison will help to identify and promote where to direct effort, what it should concern and how change can be implemented.	Rituals and routines: expected actions and behaviors. Symbols: appearance, logos, office space, dress code, advertisement. Power structures: executives, influence, decision making. Organizational structure: Hierarchy, unwritten rules, authority. Control systems: management style, reporting, performance and rewards. Stories and myths: past events, what is said about values, history and reputation.	Handscombe, 2003
35	Knoster's 5-element model	Open system. Processual model.	Helpful model for diagnosing, planning and governing change processes. If any element is missing in the change processes, then the change initiative is at risk, as it can trigger a variety of negative reactions.	Vision, skills, incentives, resources and action plan equals a successful change. If the clarity of vision is missing, people might be confused. If skills are lacking, the change might trigger anxiety. If incentives are missing, the change process might be facing only a gradual change. If the necessary resources are missing, it can cause frustration and lastly if an action plan is incomplete or not comprehensive, it might lead to a misleading and false tart	Ibrahim et al., 2019; Johansson, 2015
36	Weisbord 6-box framework	Open system. Descriptive model.	Can be used to assess organizational issues and challenges. Diagnosing and conclusions should be based on data and facts.	The key is to identify relationships between the following factors: Purpose. Structure. Relationships. Rewards. Leadership. Helpful mechanisms. Moreover, priority, meaning, weight and relationships should be assigned to these factors.	Hamid et al., 2011; Nair & Vohra, 2011; French & Bell, 2003; Stahl, 1997
37	Armenakis & Harris Model	Open system. Processual model.	The model is based on interrelated steps with the purpose to facilitate better change readiness, adoption and institutionalization of desired change.	The identification of beliefs that influence change recipients' motivations toward change. Use persuasive communication. Activate participation by those affected. Diagnosis of the need to change. Utilize HR-practices. Proactively create readiness for change. Diffuse best practices. Identify leadership to help change recipients' beliefs. Continuously assess reactions of the change recipients. Demonstrate support for change initiatives.	Cheung et al., 2010; Stace, 2017
38	Managing Successful programs framework	Open systems. Descriptive model.	The framework is designed to support organization change in a pragmatic manner with tools and techniques, and covers three components, namely, principles, governing themes and transformational flows.	Principles: Remaining aligned with corporate strategy. Leading Change. Envisioning and communicating a better future. Focusing on benefits and threats to them. Adding value. Designing and delivering a coherent capability. Learning from experience. Governing themes: Organization. Vision. Stakeholder and leader engagement. Blueprint design and delivery. Benefit realization management. Planning and control. Business case. Risk and issue management. Quality. Transformational flow: Identify change initiative. Define change. Manage tranches. Delivering capabilities. Realizing benefits. Closing change.	Pellegrinelli et al., 2007; Dolan, 2010

39	Senge et al.'s model	Open system. Descriptive model.	Built upon the idea that change cannot be predicted and planned in great detail. Changes require sense-making by addressing challenges of initiating, sustaining, redesigning, rethinking and sustaining change.	Start small. Grow steadily. Don't plan the whole thing. Expect challenges. Ensure that goals are realistic. Make sure everyone understands their role in the change. Recognize and reward activities. Ensure openness of the purpose and mission.	Rosenbaum et al., 2018; Cameron & Green, 2019; Paul, 2015
40	Nadler & Tushman's congruence model	Open system. Descriptive model.	Views organizations as a system of internal and external sources (strategy, resources and environment) and proposes that activities, behavior and performance of the system at the individual, group and system level needs to be aligned and congruent.	The inputs of the change are critical to consider in the early stages; especially the external environment, resources, history and organizational strategy. The actual work, the people, the formal and informal organization are interlinked transformational processes and as changes occur in one of these, it will have impacts on the others. Outputs are related to organizational, group and individual level. Feedback channels are set up to monitor the effects of changes.	Tushman & Nadler, 1986; Rosenbaum et al., 2018; Cameron & Green, 2019
41	Thurley & Wirdenius 5-strategies	Open system. Descriptive model.	Effective change management comes down to recognize what strategy to employ, the speed, when, where and how and involvement of others.	Directive: authority to impose clearly defined change with no involvement of others. Expert: management takes part as problem solvers. Negotiate: Management makes adjustments in regard to those affected and involved in the change. Hearts and minds: supportive and educational approach that incorporates corporate culture, people beliefs and values to gain buy-in. Participative: emphasis opportunities of stakeholders to participate in order achieve acceptance and commitment.	Brisson-Banks, 2010
42	Burke & Litwins´ model	Open system. Processual model.	Guide to diagnose, plan and manage change. Considers key drivers of change which must be understood and dealt with in an open but yet integrated approach.	External environment. Mission and strategy. Leadership. Organizational culture. Structure. Management practices. System and policies. Work unit climate. Task requirements and individual skills. Motivation. Individual needs and values. Individual and organizational performance.	Di Pofi, 2002; Spangenberg & Theron, 2013; Rosenbaum et al., 2018
43	McKinsey's 7S framework	Open system. Descriptive.	Takes a wide approach to interlinked and internal organizational elements. In order for an organization to perform well, the seven elements of the framework need to be aligned and mutually reinforcing.	Strategy: long-term plan for achieving competitive advantage. Structure: organizational structure. Systems: procedures, processes, and policies. Staff: organizational and functional capabilities. Style: leadership style. Skills: employee and managers skills and competence. Shared values: corporate culture, values and work ethic.	Voehl & Harrington, 2017; Rosenbaum et al., 2018
44	Carnall's model	Open system. Processual.	The model focuses on multiple preconditions for successful change, in which effective change management depends on management skills.	Managing transitions effectively. Dealing with organizational cultures. Managing organizational politics. Creativity risk-taking and learning. Rebuilding self-esteem and performance. Achieving change and learning.	Rosenbaum et al., 2018; Cameron & Green, 2019
45	Beer et al.'s model: Theory O	Open system. Descriptive model.	Emphasizes a six-dimensional model for organizational change, focusing on organizational long-term capabilities.	Goal: develop long-term capabilities. Leadership: participative. Focus: culture. Process: unplanned and Motivation: incentives lag. Consultants: small and process driven.	Beer & Nohria, 2000; Hudescu & Ilies, 2011; Al-Haddad & Kotnour, 2015
46	Beer et al.'s model: Theory E	Open system. Descriptive model.	Emphasizes a six-dimensional model for organizational change, focusing on economic value.	Goal: maximize economic value. Leadership: top-down. Focus: structure and systems. Process: planned and programmatic. Motivation: incentives lead. Consultants: large and knowledge driven.	Beer & Nohria, 2000; Hudescu & Ilies, 2011; Al-Haddad & Kotnour, 2015
47	Beer et al.'s model: Theory O & E	Open system. Descriptive model.	A combination of theory O and E.	Goal: embrace the paradox of developing long-term capabilities and maximizing economic value. Leadership: initiate changes from the top but engage stakeholders from the bottom. Focus: corporate culture, structures and systems. Process: expect changes. Motivation: incentives should drive progress and reinforce changes. Consultants: use as empowering experts.	Beer & Nohria, 2000; Hudescu & Ilies, 2011; Al-Haddad & Kotnour, 2015
48	Parson's model	Open system. Descriptive model.	This is a systemic but yet functional model that addresses the design of the change organization. The model involves four prerequisites and change effectiveness enablers.	To realize the timely adoption of change requirements and to meet the priorities of concerned parties, adaptive prerequisites are necessary, these concerns the level of ambition, scope and resources. To guarantee goal and results, change endeavors must target the design of the change strategy. These include clear specifications and analysis. To bring groups of people together into effective teams throughout the change process, it's necessary to address team assemblance and maintenance function. This concerns participation, education and rewards. Lastly, to safeguard the management of change, it's necessary to target the governance functions and communications.	Koster et al., 1998
49	DICE framework	Open system. Descriptive model.	Revolves around problem identification and targets relationships between key organizational factors, that contributes to the success of organizational changes.	Project duration and the time between project reviews. The performance, integrity, skills and capabilities of project teams. The commitment and dedication of executives, line organizations and people whom the change will affect the most. The additional effort that people must make.	Sirkin et al., 2005; Susman et al., 2006; Voehl & Harrington, 2017
50	Beckhard & Harris change formula	Open system. Descriptive model.	It is an approach that involves elements of change and how these relate to each other to effect change. It is built on the idea of a planned change approach, targeted management efforts and can be used to analyze how to increase the momentum of change. It considers the degree of felt need to change, degree of shared future image, and that the clarity around the next steps have to be greater than the force of resistance.	The formulaic representation of change highlighting interdependencies where each part must be evident otherwise resistance will not be overcome. The formula is written $(A \times B \times D) > X$, where A is the dissatisfaction with status quo; B the desirability of proposed change or future state; D the practicality of change and the clarity of the next steps required to implement the change; and X the cost of change.	Stace, 2017; Rosenbaum et al., 2018; Cameron & Green, 2019

Interview template

Current CM Strategy & Lessons Learned

The conceptual CM model has served as a template of topics and themes which has been asked and discussed during the interviews. An overview of the topics and themes discussed are presented in figure 3 below. For further and in-depth detail about the interview template, please go back to chapter 3.5 Conceptual CM Model and read the descriptions of the sequential phases and parallel activities.

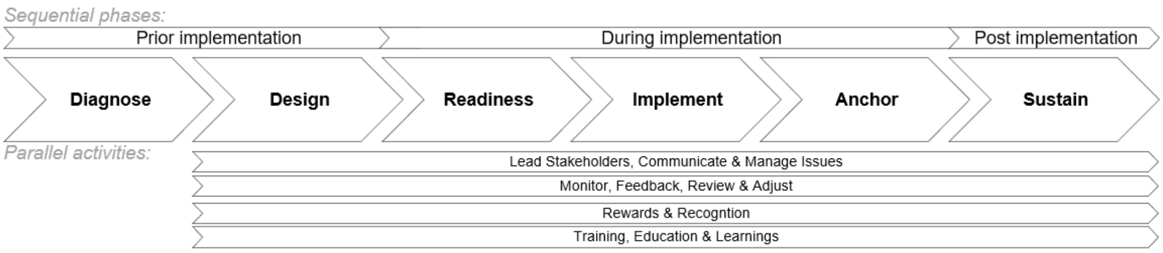

Figure 3. *Conceptual CM Model*

Comparative Analysis between Theory and Lessons Learned

This section forms a comparative analysis between the theoretical findings mentioned in *the* conceptual model *(depicted in figure 2)* and the empirical findings concerning lessons learned and experiences from past change initiatives *(discussed in the chapter: empirical findings).*

Diagnose phase
In regards to differences, the following three success factors are found either in the theoretical findings or in the empirical findings:
Theoretical findings
- *Consideration to dependencies between culture, structure, system, staff and skills.*
- *Clarification of the roles and expectations of the change leader.*

Empirical findings
- *Apply a front-end loading approach and assign resources to conduct a detailed pre-study.*

In regard to similarities, the following factors are identified both in the conceptual model and the empirical findings:
- *Assessment of market and customer conditions, readiness, maturity and demands.*
- *Assessment of organizational fit, internal needs, impact and benefits.*
- *Identify key stakeholders*
- *Formulate a unified ambition, a clear vision and a desired future state based on internal/external needs, that can influence stakeholders on different levels.*
- *Formulate a detailed high-level CM plan.*
- *Develop change leaders' CM skillset.*
- *Allocation of CM resources.*

Design phase
In regard to differences, the following success factors are found either in the theoretical findings or in the in the empirical findings:
Theoretical findings
- *Plan how to mark an ending and separate from the past and past projects.*
- *Assess, clarify and put together a compelling change story consisting of what makes it worth undertaking, what's changing, why and when, what's remaining the same and who's participating in the change.*
- *Define the entry and exit requirements for when activities are initiated and fulfilled.*
- *Conduct a gap analysis of the current and future organizational culture.*
- *Prepare for changes in work climate before setting plans in action.*
- *When setting goals and targets, embrace the paradox between economic value and organizational capability.*

Empirical findings
- *Avoid planning change as "isolated events" or in "organizational silos", instead apply a cross-functional and collaborative approach.*
- *Plan how to get in agreement and signoffs with key stakeholders or change recipients.*
- *KPIs and potential solutions should be agreed on and handshake(d) with concerned stakeholders.*
- *Reach agreement and sign-off with key stakeholders and receivers of a change initiative.*

In regard to similarities, the following factors are identified both in the conceptual model and the empirical findings:

- *Craft a stakeholder strategy.*
- *Craft a communication strategy.*
- *Prepare to answer the WIIFM-question for diverse groups of stakeholders.*
- *Craft a comprehensive and systematic end-to-end change plan.*
- *Plan the involvement of line organizations and informal leaders in the change process.*
- *Break down the project into smaller parts with smaller scope and length.*
- *Don't plan the whole change. Expect adjustments and incorporate agility in the change plan.*
- *Analyze, plan and evaluate methods for how to gain commitment and how to handle resistance.*
- *Involve HRM practitioners in the change process and utilize insights*
- *Plan for clear and short-term goals.*
- *Plan for how to measure the progress and decide when, how often, who will monitor and report status reports.*
- *Prioritize where to anchor change efforts and adapt change approach.*

Readiness phase

In regard to differences, the following success factors are found either in the theoretical findings or in the empirical findings:

Theoretical findings

- *Officially let go of the past and marking an ending.*
- *Create enthusiasm and provide guiding images of the future.*
- *Mobilize commitment through joint diagnosis of problems and based on this develop a collective awareness and understanding of organizational problems. Communicate shared goals for how to overcome the problems.*
- *Prepare stakeholders for what is coming and present a structured and systemic change plan.*
- *Find ways to utilize and leverage corporate culture to benefit change.*

Empirical findings

- *Start communications and readiness activities earlier with business units and market areas that are expected to slow down the change progress later on.*

In regard to similarities, the following factors are identified both in the conceptual model and the empirical findings:

- Involve and get informal leaders onboard.
- *Use crisis or provoke a sense of urgency, increase the anxiety about doing nothing, increase the felt need for change and make key stakeholders experience organizational problems.*
- *Communicate the vision, create collective awareness and understanding of change initiative.*
- *Activate change recipients. Collect feedback, ideas and explore new insights through dialogue and involvement of stakeholders.*
- *Monitor and evaluate the change recipient's reactions, awareness and understanding for the change, and whether the change message is getting through and if they are ready for the changes early on.*

Implement phase
In regard to differences, the following success factors are found either in the theoretical findings or in the empirical findings:
Theoretical findings
• Utilize change agents at all levels of the organization and foster strong ties to all concerned employees.
• Remind and empower stakeholders to act on the vision.
• Implement change in small distinct steps.
• Aim at early, small wins and gain early adopters fast.
• Consider suitable best practices and knowledge gained into broader rollouts.
• Maximize employees' contribution to the change process. Encourage innovative thinking and challenge people to question assumptions about the work to find better ways of working.
• Evaluate and survey stakeholders and change recipient's awareness, understanding, acceptance and commitment to change.
• Monitor, and mitigate unfavorable reactions, behaviors and emotions that individuals exhibit during the change process with appropriate interventions.

Empirical findings
• Enhance and promote transparency, openness, collaboration.

In regards to similarities, the following factors are identified both in the conceptual model and the empirical findings:
• Verify improvements and solutions currently being developed with end-users or customers and gather insights and feedback.

Anchor phase
In regards to differences, the following success factors are found in either in the theoretical findings or in the in the empirical findings:
Theoretical findings
• Evoke burning platform strategy to remind stakeholders of the urgency and make it impossible to do things any other way.
• Refine change plan if necessary. Monitor and evaluate strategies that are not having the desired effect, or planning assumptions that are no longer valid.
• Monitor and evaluate acceptance and commitment of stakeholders and take actions accordingly.

In regard to similarities, the following factors are identified both in the conceptual model and the empirical findings:
• Identify and consider non-compliant voices and resistance for constructive feedback and insights.
• Start small, spread and diffuse the change with incremental deliveries and partial solutions.
• Make early successes visible to all stakeholders. Communicate both quantitative and qualitative results and benefits.
• Reinforce desired behaviors and ensemble teams of change champions, agents and ambassadors to support the change.
• Involve line organization in planning and managing the handover.
• Take measures to ensure smooth transition into operations and adoption to line organization.
• Allocate resources and ensure that employees can cope with the additional effort to adopt new ways of working and remove nonessential regular work from employees with key roles.

• Make top management participation, interest and commitment visible.

Sustain phase
In regard to differences, the following success factors are found in either in the theoretical findings or in the in the empirical findings:
Theoretical findings

• Do not declare victory too early.
• Modify and ensure that structures, systems, policies, processes, rewards, training, development and job roles have an organizational fit that fits the new state, if not adjust.
• Assess organizational alignment. Map the relationship between, people and work, people and structure, people and culture, work and structure, work and culture and the structure and culture.
• Utilize progress to convince and strengthen cultural and behavioral changes.

In regard to similarities, the following factors are identified both in the conceptual model and the empirical findings:
• Communicate and spread unexpected and positive outcomes.
• Gather and transfer positive aspects of the entire change process to the line organization.
• Spread knowledge, results, benefits and success stories.
• Mark a clear ending of the change initiative.

Lead stakeholders, communicate and manage issues phase
In regards to differences, the following success factors are found in either in the theoretical findings or in the in the empirical findings:
Theoretical findings
• Motivate people by targeting their autonomy, mastery and purpose.
• Involving people at an early stage can help to win over their hearts and minds.
• Demonstrate commitment and endorsement to change, as efforts of leaders influence stakeholders felt need and willingness for change.
• Update the stakeholder, communications and risk plan continuously.
• Regularly communicate the issues and pressures that triggered the change initiative.
• Continuously communicate a compelling story behind the change and the new organization.
• Repeat information about what is changing as it will take time to sink in.
• Use catch phrases and storytelling to communicate the change.

Empirical findings
• Utilize newsletter, pictures, visuals, share progression and result of pilots, how prioritization of changes will occur (e.g. where are things being implemented now and what countries in the que for change), make the communications as comprehendible and standard as possible.
• Monitor all stakeholders, as the influence and interest of stakeholders can vary through the change process.
• Rebrand the change initiative, if it has a bad reputation or if viewed as a failure to distance the change initiative from negative connotations or events of the past.

In regard to similarities, the following factors are identified both in the conceptual model and the empirical findings:
• Top leaders and executives must take part, communicate the message and drive the progress.

• Utilize different channels and adapt frequency of communication accordingly.
• Ensure that all messages about the change are consistent and clear. Dispel rumors quickly.
• Mobilize and gain support, by delegating power and responsibilities to local change agents, champions and ambassadors to gain momentum, but follow-up on frequently.
• Control and retain manager turnover, and carefully pick new leaders and ensure that the next generation managers continue to support the change.
• Offer support and counseling to make people feel cared for and consult with people before making decisions that affect them, while keeping people focused on the execution plans and the hard work ahead.
• Encourage people to speak up and consider their concerns, not as a threat but as crucial insights and constructive critique that should be considered.

Monitor, feedback, review & adjust phase
In regards to differences, the following success factors are found in either in the theoretical findings or in the in the empirical findings:
Theoretical findings
• A continuous cycle of monitoring, reviewing can minimize problems and helps to keep the change on track.
• Continuously take the pulse of key stakeholders, therefore a feedback system should be set up and used. Assess e.g. their awareness, understanding, acceptance and commitment.
• Monitor top management's attention, commitment and support, and take action accordingly when these aspects decrease or diminish.
• Differentiate between project, change and business outcomes.
• Assess the commitment and capability for change regularly, especially aspects concerning the project length or duration, integrity, commitment and effort.
• Plan and initiate positive, reinforcing and self-driving mechanism loops and prevent negative ones.

In regard to similarities, the following factors are identified both in the conceptual model and the empirical findings:
• Seek new or alternative ways to showcase positive results. Formulate KPIs and metrics that e.g. focus on creativity, job involvement, job satisfaction, adoption and communications (as these are perceived to be more fun, which in turn could create better acceptance and commitment).
• Review the change process by both internal and external experts, as a quality assurance.
• High-level and overarching goals must be aligned cross-functionally, and broken down into shorter, smaller and operational metrics.
• Strive for transparency in regards to sharing the progress (e.g. what's done, upcoming work, responsible ones, challenges etc.).
• KPIs and metrics should be made extremely easy to follow and visualized so that all of the organization can follow and understand.

Rewards & recognition phase
In regard to differences, the following success factors are found in either in the theoretical findings or in the in the empirical findings:
Theoretical findings
• Retain and reward influential management involved in driving the change.
• Celebrate achievements.

Empirical findings

• Establish rewards or incentives systems that promote managers to address and solve underlying complex and critical issues that need to be handled in order to ensure the success of the project (avoid only focusing on low-hanging fruits).

In regard to similarities, the following factors are identified both in the conceptual model and the empirical findings:
• Set up a reward program and initiatives.
• Publicly praise desired behaviors and criticize disruptive, divisive behaviors, in order to reinforce desired habits. Share, communicate and spread successes.
• Revise incentives and bonus systems to reinforce changes and reprimands to reduce unfavored behaviors.

Training, education & learnings phase
No differences were identified, only similarities. In regard to similarities, the following factors are identified both in the conceptual model and the empirical findings:
• Plan and set up training programs, workshops, courses
• Develop stakeholders' skills, knowledge and ability to support the change.
• Collect and spread learnings of the change process.
• Document and share organizational learnings, experiences and make it easy to access the information (Empirical finding).

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