UNIVERSITY OF TURKU + **ABSTRACT**

	Bachelor's thesis
x	Master's thesis
	Licentiate's thesis
	Doctoral dissertation

Subject	Organizational Management	Date	11.09.2020
Author	Valtteri Miettinen	Number of pages	108+appendices
Title	Implementing change project idea portfolio - Case: Project Portfolio Management practices in LocalTapiola		
Supervisor	Dr. Sc. Satu Teerikangas		

Abstract

As business becomes increasingly project-oriented, the ability of companies to manage their change project portfolios is emphasized. At the same time, companies are struggling with ever-increasing external demands. Moreover, companies are unable to implement the amount of internal ideation they want, as resources flow to maintain business continuity. Therefore, companies must be agile in their operations in order for them to operate as efficiently as possible when managing the agile and complex change project portfolios. This thesis seeks to answer the following research question: how to develop LocalTapiola's project portfolio management (PPM) process, with a focus on the agile early-stage process. Moreover, to get an answer to the research question this thesis must find the answers to the following operational objectives: how is the PPM process currently arranged in LocalTapiola?, how can LocalTapiola develop their PPM process to be more agile and which challenges LocalTapiola is facing in its PPM process.

This thesis is a qualitative case study based on an action research. The PPM literature has extensively studied the processes of change project implementation for many decades. However, the early-stage process of PPM has been left without deeper research attention. To fill this research gap this thesis forms a comprehensive picture of the PPM process based on the previous literature and by interviewing ten people from the case company at different hierarchical levels around the PPM process. This enables comparing the process identified from the case company case with literature. Besides, this thesis explores how the company's PPM process could be applied in a more agile way.

This thesis identified five elements to be considered in the early-stage of the PPM process. These are project evaluation, preparation, strategical focus, dependency management, and transparency. In addition to these aspects, this research found five crucial elements that a company should consider when forming a more agile PPM process. These are continuous process evaluation, stable teams, flexible budgeting, involving decision making, and strategy-based decisions. Finally, this thesis suggests adding pre-screening and utilizing phases to the case company's current PPM process. It is also proposed that the Business Change Management (BCM) -team used in the case company could be more widely deployed to help to utilize business benefits.

Keywords	Project Portfolio Management, Idea Portfolio, Change Projects, Early-stage Project Portfolio, Agile Project Portfolio Management

TURUN YLIOPISTO

TIIVISTELMÄ

	Kandidaatintutkielma
x	Pro gradu -tutkielma
	Lisensiaatintutkielma
	Väitöskirja

Oppiaine	Organisatorinen Johtaminen	Päivämäärä	11.09.2020
Tekijä	Valtteri Miettinen	Sivumäärä	108+liitteet
Otsikko	Implementing change project idea portfolio - Case: Project Portfolio Management practices in LocalTapiola		
Ohjaaja	Dr. Sc. Satu Teerikangas		

Tiivistelmä

Yritystoiminnan muuttuessa yhä enemmän projektiluontoiseksi korostuu yritysten kyky hallita omia projektisalkkujaan. Samalla nykypäivänä yritykset joutuvat kamppailemaan alati lisääntyvien ulkoisten vaatimusten kanssa ja täten eivät pysty toteuttamaan haluamaansa määrää yrityksen sisäistä ideointia resurssien kohdistuessa toiminnan jatkuvuuden ylläpitämiseen. Yritysten olisikin tärkeä ketteröittää omaa toimintaansa, jotta ne pystyisivät toimimaan mahdollisimman tehokkaasti tässä kiristyvässä kilpailussa. Tässä tutkielmassa pyritään löytämään vastaus seuraavaan tutkimuskysymykseen: kuinka kehittää LähiTapiola muutos projektisalkunhallinnan prosessia keskittyen ketterään alkuvaiheen prosessiin. Vastauksen saamiseksi tutkimuksen on löydettävä vastaukset seuraaviin toiminnallisiin tavoitteisiin: miten projektisalkunhallinnan prosessi on tällä hetkellä järjestetty LähiTapiolassa, miten LähiTapiola voi kehittää projektisalkunhallinnan prosessiaan ketterämmäksi ja mitä haasteita LähiTapiola on kohdannut omassa projektisalkunhallinnan prosessissaan.

Tämä tutkimus on laadullinen tapaustutkimus, jossa käytetään toiminnan tutkimustyyppistä lähestymistapaa. Projektisalkkuhallinnan (PPM) kirjallisuudessa on tutkittu laajasti yritysten PPM:n ympärillä olevaa prosessia vuosikymmenien ajan, mutta PPM:n alkuvaiheen prosessia ei ole tutkittu perusteellisesti. Tämän tutkimusaukon täyttämiseksi tämä tutkimus on aluksi muodostanut kattavan kuvan PPM-prosessista aikaisemmista tutkimuksista. Tämän jälkeen tutkimuksen data on kerätty haastattelemalla 10 ihmistä, jotka toimivat eri hierarkkisilla tasoilla esimerkkiyrityksen PPM-prosessin ympärillä reflektoiden esimerkkiyrityksestä tunnistettua PPM-prosessia kirjallisuuteen. Lisäksi tutkimuksessa on selvitetty, kuinka yrityksen PPM-prosessista saataisiin vieläkin ketterämpi ja ehdotetaan mihin alkuvaiheen kohtiin yrityksen tulisi kiinnittää huomiota toteuttaessaan ketterämpää muutoshankkeiden idea portfoliota.

Tutkimuksessa löydettiin viisi seikkaa, jotka olisi hyvä ottaa huomioon PPM-prosessin aikaista vaihetta muodostaessa. Nämä ovat hankkeen arviointi, valmistelu, strateginen painopiste, riippuvuuden hallinta ja läpinäkyvyys. Näiden lisäksi tutkimuksessa löydettiin viisi seikkaa, jotka yrityksen tulisi ainakin ottaa huomioon muodostettaessa ketterämpää PPM-prosessia. Nämä ovat jatkuva prosessien arviointi, ydintiimit, joustava budjetointi, osallistava päätöksenteko ja strategiapohjaiset päätökset. Tutkimuksessa ehdotettiin myös esiseulonnan ja hyödyntämisen vaiheiden lisäämistä PPM-prosessiin. Lopuksi tutkimuksessa ehdotettiin, että tapaustutkimuksessa käytetty Business Change Management (BCM) -tiimi otettaisiin laajemmin käyttöön kehitysprojektien liiketoiminnallisten hyötyjen realisoimisen tukena.

Avainsanat	Project Portfolio Management, Idea Portfolio, Change Projects, Early-stage Project Portfolio, Agile Project Portfolio Management

UNIVERSITY OF TURKU
Turku School of Economics

IMPLEMENTING CHANGE PROJECT IDEA PORTFOLIO

Case: Project Portfolio Management practices in LocalTapiola

Master's Thesis
in Organizational Management

Author:
Valtteri Miettinen

Supervisor:
Dr. Sc. Satu Teerikangas

11.09.2020
Turku

The originality of this thesis has been checked in accordance with the University of Turku quality assurance system using the Turnitin OriginalityCheck service.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1 INTRODUCTION

1.1 Background

Organizations are increasingly becoming project-based (Hunt & Killen 2008; Morcos 2008; Hynuk et al. 2009, 14; Hunt & Killen 2013, 132; Duggal 2018, 3), which in turn is because the operating environment of companies is constantly becoming more agile where changes take place at a rapid pace. Therefore, a company is expected to react agilely to changes in the operating environment. (e.g. Hunt & Killen 2008.) Furthermore, the speed and level of development increase and the number of projects have also increased 40-fold in 20 years. Furthermore, projects have become more complex and challenging to implement (e.g. Benko & McFarlan 2004), which makes it challenging to select and balance projects with the company's strategy (Killen, Hunt & Kleinschmidt 2008; Ahmad et al. 2016). As a result, companies have many projects underway and in preparation, and they will have to manage more and more large project entities and portfolios (Ahmad et al. 2016). Today, large companies often have many change projects to develop at the same time (Benko & McFarlan 2004). This set of change projects can be called a *project portfolio* (PP). Careful change *project portfolio management* (PPM) enables a company to implement its strategy more effectively. (Meskendahl 2010; Lock & Wagner 2019.)

The whole change PPM process has been studied a lot during the past decades (e.g. Hunt & Killen 2008; Morcos 2008; Hynuk et al. 2009, 14; Hunt & Killen 2013, 132; Stentoft, Freytag & Thoms 2015; Silva & Oliveira 2016; Cooper 2017). However, the early-stage PPM process has not been extensively studied (Heising 2012). According to a study by Hunt and Killen (2013), most companies reported that they do not achieve the desired ratio of new ideas for further change projects. All projects are at some point ideas, and as a result, successful idea portfolio management largely determines a company's ability to innovate and grow (Benko & McFarlan 2004). For this reason, companies should increasingly understand the importance of innovation and ideas for business continuity (Killen, Hunt & Kleinschmidt, 2008). By analyzing innovations and managing the early-stage PPM process, and thereby resourcing the right projects, a company can achieve better results and increase performance (Benko & McFarlan 2004). As the value of early-stage PPM increases, the importance of the research area is also growing.

The research has been carried out as a single case study, which aims to examine how to develop LocalTapiola's PPM process, with a focus on the agile early-stage process. Accordingly, for this thesis to be able to answer the question and suggest solutions, this thesis must find out the status of the entire PPM process of the case company. As change projects become more visible at an earlier stage – although projects are not fully prepared – they can be better evaluated and prioritized (Hunt & Killen 2008). Besides, resources can be allocated to projects based on the strategic value (Hunt & Killen 2013, 132; Stentoft, Freytag & Thoms 2015; Silva & Oliveira 2016; Jiao et al. 2019). Therefore, ideas can be better used to prioritize projects that support strategy over development. This thesis also identifies the challenges that the case company currently faces when managing an extensive change PP. Moreover, this thesis highlights issues to be considered when forming an early-stage PPM process. Figure 1 illustrates the change PPM process strongly used throughout this thesis.

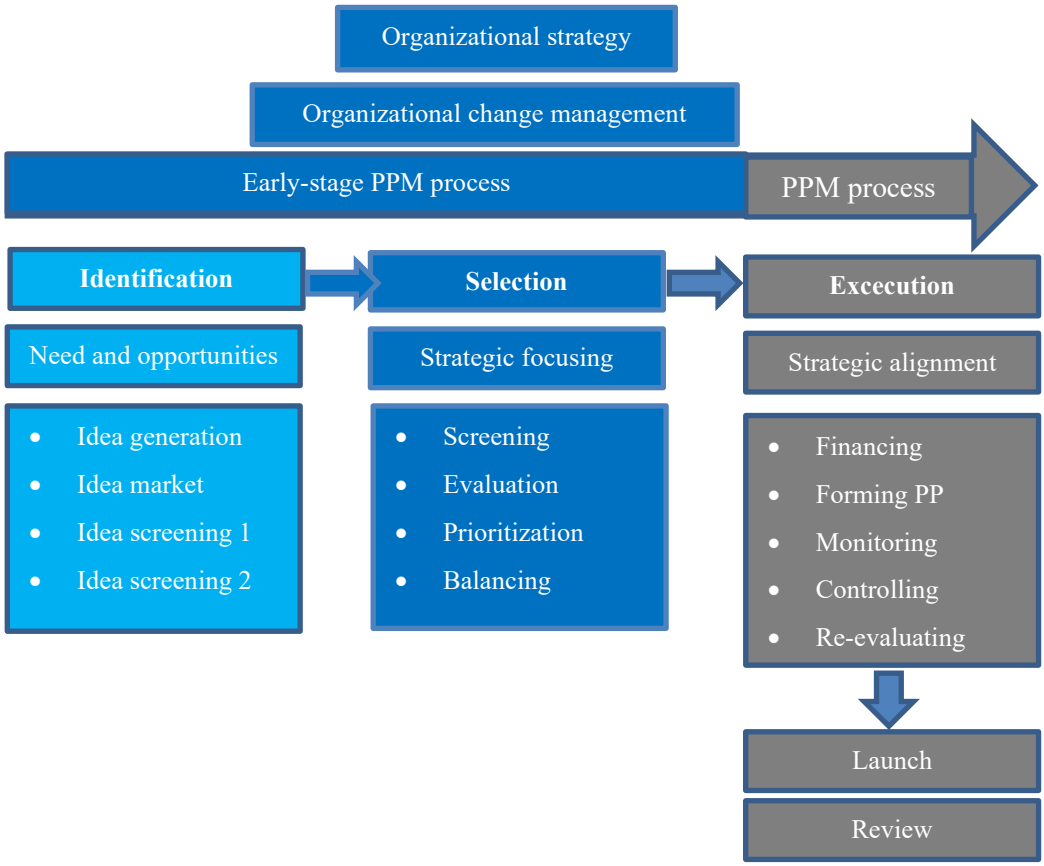

Figure 1 Change PPM process (Modified from Killen & Hunt 2010; Bentzen & Christiansen 2011; Ramakrushna 2017)

1.2 Case LocalTapiola

An increasing number of customers are encountered online. The insurance industry is modernizing its systems with a view to more accessible and more extensive online services. From a customer`s perspective, the service should be more seamless. With the multi-channel nature of insurance transactions, the importance of good customer experience is even greater. (LocalTapiola 2019b.) Therefore, the management of a large and complex change PP's should be as efficient and agile as possible and help the company achieve its goals, help customers to become financially self-sufficient, increase healthier life years, and compensate, and prevent damages (LocalTapiola 2019b). The values that guide everything that the company does are benevolence, passion, and courage (LocalTapiola 2020a).

LocalTapiola`s change PP has more than 100 change projects each year. Projects can be IT and ICT projects that improve efficiency or customer relationship management. Moreover, a large portion of the company's PP consists of legal and compliance requirements. Managing this entity has proven to be challenging for the company. Now LocalTapiola is aiming to invest more to profoundly evaluate project proposals at an early-stage. Furthermore, the case company is amidst constant organizational change currently changing its PPM processes in a direction where early-stage projects could be considered at an earlier stage. However, by working in the form of projects, managing change PP's, the organization can contribute to ensuring strategy-based operations, the achievement of goals and is able to respond to aggressive competition at a fast pace. (Morcos 2008; Hynuk et al. 2009, 14; Hunt & Killen 2013, 132; Stentoft, Freytag & Thoms 2015; Silva & Oliveira 2016.) At the same time, the case company aims to develop its PPM process to be more agile. The PPM process would need to change for the company to allocate resources to needed projects, to identify complex project PP dependencies better, and better to prioritize early-stage projects suitable for its strategical guidelines. Currently, lack of the formal early-stage PPM process has caused that the case company will not have a decent view of new upcoming projects until project teams are applying for financing to carry out the project. Although all changes are unique, various change PPM models have been put forward to support PPM to facilitate the organizational change processes more effectively. (Lock & Wagner 2019.) Nor is the case company an exception to this, but the company has created the PPM process to support its work. The PPM process identified from the case study is presented in chapter 4.1.

1.3 Research questions

Even though LocalTapiola has a wide range of complex projects in its PP, the whole change PPM process must be planned, structured, and executed well before it will gain excellent results (Lock & Wagner 2019). Up to 70% of organizational change projects fail to achieve set goals (e.g. Todnem 2005, 370; Smits & Bowden 2015). Therefore, it can be assumed that there could be some issues when planning, prioritizing, processing, and executing organizational change projects (Cooper, Edgett & Kelinschmidt 2000). Consequently, this thesis aims to understand the current PPM process in the case company, to examine how LocalTapiola can develop its PPM process to be more agile and to recognize which challenges LocalTapiola is facing in their PPM process. Through these operational objectives, this thesis seeks to answer the following research question:

- How to develop LocalTapiola's PPM process, with a focus on the agile early-stage process?

Thus, to get an answer to the research question, the study must find the answers to the following operational objectives:

- How is the PPM process currently arranged in LocalTapiola?
- How can LocalTapiola develop their PPM process to be more agile?
- Which challenges LocalTapiola is facing in its PPM process?

1.4 Thesis structure

The thesis continues as follows: Chapter 2 will focus on the theory part of the research. This chapter provides a theoretical framework for this thesis, based on which the results of the study will be examined. Therefore, this study is a theory-based case study. First, this chapter takes a broader picture giving an overview of organizational change management. Second, the chapter moves on to look at the PPM process from a theoretical perspective. Third, the chapter identifies methods on how to create an early-stage PPM process. Last, the chapter delves into what needs to be considered when developing an agile PPM process. Chapter 3 moves to illustrate the progress of the research process and the methodological part of the research. In addition, this chapter focuses on the empirical part of this thesis and illustrates the collected data whilst presenting research methods and

analysis. Furthermore, this chapter will deal with issues related to the validity and reliability of the research. Chapter 4 introduces the results of the research. Chapter 5 moves on to discuss and review the results of the research based on the theoretical findings and describes the answers to the research question and operational objectives. Finally, chapter 6 concludes the research with both contributions and managerial implications and limitations and suggestions for future research.

2 LITERATURE REVIEW

This chapter moves on to develop the theoretical framework of the thesis, starting from defining and reviewing the broad field of organizational change management (e.g. Moran & Brightman 2001; Struckman & Yammarino 2003). The theoretical framework of this thesis consists of defining organizational change and goes through the planned organizational change. Next, the theoretical framework is complemented while illustrating the PPM process (e.g. Cooper, Edgett & Kelinschmidt 2000) through literature focusing on the early-stage PPM process (e.g. Lock & Wagner 2019). Finally, this chapter explores how the literature sees agile PPM (e.g. Silva & Oliveira 2016).

2.1 Organizational change management

This chapter aims to describe the theoretical framework of organizational change. In addition, this chapter deals with organizational change from a planned point of view. The section begins with an overview of organizational change and continues to address the planned organizational change.

2.1.1 An overview

Organizational change (OC) has been studied for many decades. However, the perception of change has evolved over the years. According to Kotter (1996, 22), OC is a process that will never succeed without effective leadership. Furthermore, according to Moran and Brightman (2001, 111), OC can be described as a process of moving towards a strategic goal set by the company. To this, Struckman and Yammarino (2003, 10) add that OC is a derived system that evolves in human use. However, there have been presented many ways and models to manage OC.

Furthermore, Appelbaum et al. (2018) have described OC as a process that is implemented in stages through *change management* (CM), considering the organizational strategy. Besides, according to Moran and Brightman (2001, 111) in OC, management must be able to be continuously reformed, both at the level of thought patterns and the structural level, as external needs change. External needs refer, for example, to changes in the market situation. What is essential in managing change is that during it, the traditional means of management are challenged, and based on them, functional entities suitable for the organization's strategy are created.

In the early 1960s, *organizational change management* (OCM) literature, the coordination of strategy, the company's structural factors, as well as the adaptation of the company's structures and environment to a functional entity have received the most attention in connection with the company's change process (Siggelkow 2001, 838). At the time, OC was seen more as individual parts without being able to examine the interdependencies and effects of the various internal and external components (Pettigrew 2001, 698). Subsequently, before the 1990s, the literature has identified that the company's internal resources in terms of culture and personnel also had a significant impact on the change. At the same time, the potential competitive advantage that can be gained through the company's internal resources, which enables the company to stand out in a competitive market, was identified. However, identifying all these themes was intended to understand the company's operations and the decisions made by the organizations. (Siggelkow 2001, 838.)

Particularly in a complex, dynamic, and international market environment, the search for general patterns of change requires more attention in terms of temporal and external factors influencing operations (Dunphy & Stace 1993; Pettigrew 2001, 698). However, Burnes (1996, 11) sees that no unambiguous idea has been reached in the literature as to what would be the best way for organization to implement OC. Thereafter, best practices for the change as presented in the literature have been challenged. They have been replaced mainly by guidelines to guide the organization's operations so that organizations can succeed in the change in the future. According to Dunphy and Stace (1993, 905–906), researchers of change generally see the model they present as a general application. Nevertheless, each OC is implemented in different circumstances, and therefore the changes need a proven snapshot and a model to implement the different changes. Besides, different models and snapshots would allow the company's management to vary different strategies between different change situations.

Findings show (Dunphy & Stace 1993; Pettigrew 2001; Appelbaum et al. 2018) that each *Organizational Change Project* (OCP) is unique, so it is not possible to present comprehensive models, but many researchers have sought to present their models of OC (e.g. Burnes 1996; Kotter 1996; Moran & Brightman 2001; Rosenbaum 2018). Furthermore, this may follow from the difficulty of defining and measuring change and the lack of concrete, scientifically proven models for Change Management that enable companies to make a variety of OCP`s. However, it should be noted that the pace of OC is faster than ever before (Todnem 2005, 370). The speed of change is brought about by the fact that

change arises from both external and internal factors that affect every company, regardless of its size, in all industries (Kotter 1996; Todnem 2005, 370). For this reason, handling OC should be part of the daily lives of organizations.

To conclude, the concept of OCM has not changed radically in recent decades, but it has become more strategy-oriented. Despite all the presented models and guidelines for the OC, all the change projects remain different. Therefore, those should be managed carefully using planned OC and OCM process, which will be illustrated in the next section.

2.1.2 Planned change process

The market environment is changing rapidly, and therefore organizations need to react quickly by taking the required measures to achieve the set goals. Due to the dynamism of the market, companies have moved in even more creative direction in their operations to be able to respond to internal and external OC's even faster (Smits & Bowden 2015). OCM literature is generally divided into two approaches. One sees OC as managed and planned (e.g. Burnes 1996; Kotter 1996; Moran & Brightman 2001; Rosenbaum 2018), while the other approach sees OC as emerging and unplanned (e.g. Senior 2006). This thesis examines OC as a managed and planned phenomenon because PPM and the related idea portfolio process requires management and coordination of processes, people, and structures around it (e.g. Pennypacker & Dye 2002; Killen & Hunt 2010; Heising 2012; Hunt & Killen 2013).

Many different models of the planned OC have been presented in recent decades (e.g. Kotter 1996; Burnes 2004; Abbott & Booth 2014, 136). Although the models have been different, the same features and patterns of progression can also be found in them. According to planned OCM theory, OC can be considered relatively straightforward, where the company implements the change by first identifying the need for the change, preparing, and planning the change, and then implementing and maintaining it in its operations. (e.g. Kotter 1996; Huy 2002; Vora 2013, 626.) Because the need for OC is different for each company, there must also be many solutions for the change (e.g. Dunphy & Stace 1993; Pettigrew 2001; Appelbaum et al. 2018). To be able to understand the change, the organization should identify its change and the critical factors associated with it. In addition to the strategy, structure, organizational culture, and knowledge of the organization, it is essential to know the potential for improving structures and processes through

change. When organization understands the factors that are important to change, it is easier to achieve its goals. Thus, understanding the organizational processes, environment and culture thoroughly can be challenging for an external change agent. (Smits & Bowden 2015, 10–11.) Figure 2 shows one example of the OCM process based on the well-known Kotter model.

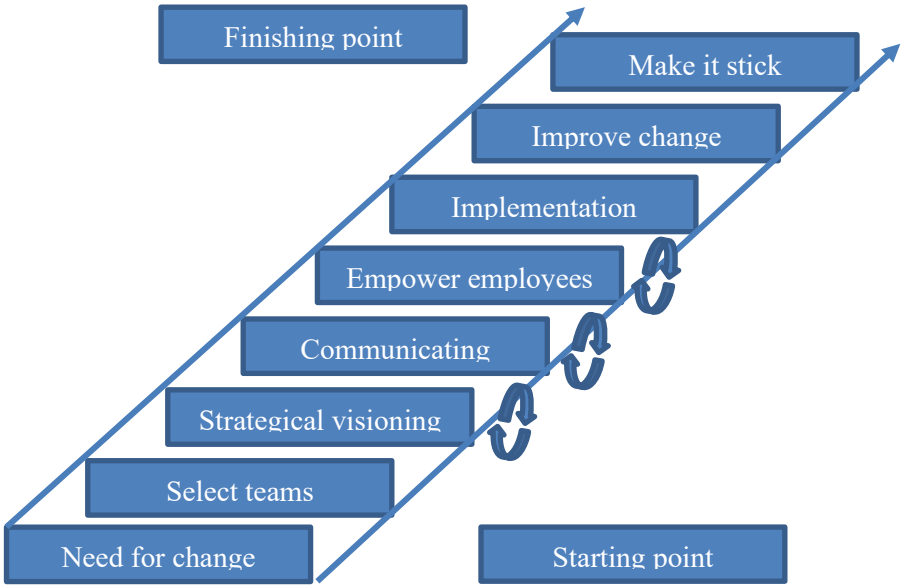

Figure 2 Organizational change management process (Modified from Kotter 1996)

When illustrating Figure 2, at the *need for change* stage, the organization identifies the need for the change, prepares, and plans the change project (Vora 2013). Besides, in this stage the organization will also plan how the change project will be implemented and finally arranges the necessary resources for it by *selecting teams*. Moreover, this can be executed by identifying change enablers and critical personnel (Smits & Bowden 2015, 4). At the same time, it is proposed that a change team should be formed. At this point, the conditions for success are created by selecting an experienced and influential person who is valued in the company as the leader of the *Business Change Management* (BCM) team. Likewise, experienced and most skilled employees should be selected for this team. For change management to be appropriately implemented, BCM team members must be committed and responsible for making change-related decisions. The BCM team should have the support of the company so that decisions can be made with high priority. (Smits & Bowden 2015, 18.) However, each OC is different in scope, the object of change, and resources. Therefore, the organization, team roles, and responsibilities of each OC must be formed and agreed upon in a manner appropriate to the change. No matter how big the change, the BCM team should identify the changes in operating models and processes,

roles, train the change for the target groups, and communicate the change. (e.g. Vora 2013; Smits & Bowden 2015.)

Because the need for change in organization is different for every change project, the organization must identify its change and the critical factors associated with it (Buchanan 2003, 665). In addition to knowing the strategy, structure, organizational culture, and people of the organization, it is crucial to know the potential for learning and change (Smits & Bowden 2015, 10—11; Kotter 1996, 20—23).

A close concept related to OCM is *strategical visioning*. According to Smits and Bowden (2015), good strategic planning leads to success in structural changes. Once organization understands the factors that are important to change, it will also make it easier for them to reach their goals (Smits & Bowden 2015, 10—11; Kotter 1996, 20—23). In a modern industrial environment, it is challenging to find important differentiating factors for a company when every organization operates in an environment where gaining and maintaining a competitive advantage is a prerequisite for success. (Smits & Bowden 2015, 4.) A well-planned and real change program is one of the factors contributing to the success of the change. When preparing for a change, the company must keep a clear eye on the organizational needs already identified. (Huy 2002.) There must be a clear plan for the change that will allow the company to achieve its goals. The OC plan should be considered at least through political, economic, social, and technical goals. Planning before the transformation process successfully integrates the company's internal resources with the changed structure and culture of the organization. (Smits & Bowden 2015, 11; Struckman & Yammarino 2003, 25; Kotter 1996, 20—23.)

The company needs to prioritize the most critical change projects since everything cannot be done at once. The importance of proper planning is then emphasized for the success of the change. (Livne-Tarandach & Bartunek 2009, 8.) When a change is made, the company will determine the order of priority of the change projects to be made based on the plan (Struckman & Yammarino 2003, 25). Smits and Bowden (2015, 11–12) add that the nature of the change is initiated to determine how the change is planned and implemented. However, in their view the goal of all types of change is to create competency multipliers and satisfy customers. Thus, in the future the company will strive to achieve a better level of activity than before the change (March 1981). According to Smits and Bowden (2015, 11–12) and Struckman and Yammarino (2003, 25), there are models for change leaders that can be applied to different situations of change. Models can help

change leaders reduce the uncertainties of change and understand the complexity of change (Kotter 1996, 20—23).

Next, change must be managed and *communicated* at each stage of change. Communication should also be directed to all levels of the organization, from the strategic, administrative, and operational levels, in a coherent and integrated manner. Besides, this means that a successful change in the company requires commitment from the entire organization. (Kotter 1996; Weick & Quinn 1999, 375; Vora 2013; Smits & Bowden 2015, 7.) Change communication should also focus appropriately on accurate and targeted communication (Struckman & Yammarino 2003, 35). Indeed, major changes are challenging and require, along with careful planning, several milestones during which the company can measure its progress and stay on track with the change (Appelbaum et al. 2018, 45–46).

Through separate smaller milestones, the company also maintains the motivation of its personnel, while at the same time giving an open view of its operations and the stage of change. The change should, therefore, be carefully managed and honored by *empowering employees.* (Smits & Bowden 2015, 13.) Furthermore, this means that as change progresses, employees involved in the change are motivated by rewarding their successful performance (Struckman & Yammarino 2003, 26).

However, the change does not end with its *implementation* but continues with the stage where it is improved and *further developed* (Abbott & Booth 2014). Besides, this is the stage where change is *made stick* at the everyday culture and structures of a permanent company. (Smits & Bowden 2015, 13; Appelbaum et al. 2018, 46; Kotter 1996, 20—23.) At this stage, the change implements a culture of continuous monitoring and further development that aims to meet better the needs of the organization (Vora 2013). However, this alone is not enough. Change is as good as the culture of change created for its recipient, the new operating models and roles implemented (e.g. Moran & Brightman 2001). However, change is ultimately the responsibility of the entire organization's staff, and therefore a committed and positive atmosphere is required around them. If the entire organization is not involved in the change, the change in the company could fail. Indeed, change can be described as a journey that a company travels from a planned vision to a permanent change. (Moran & Brightman 2001, 111–112.)

Before that, the prerequisites identified for successful OC in the review are gathered in the following Figure 3. To conclude, the change management discussed above and its

link to the management of change projects brings us to address an issue that larger companies face. Today larger companies have many external and internal requirements for change projects that they must form one or more change PP's. (Stettina & Hörz 2014.) In this case, change management can be addressed through the PPM process, which is illustrated in the next section.

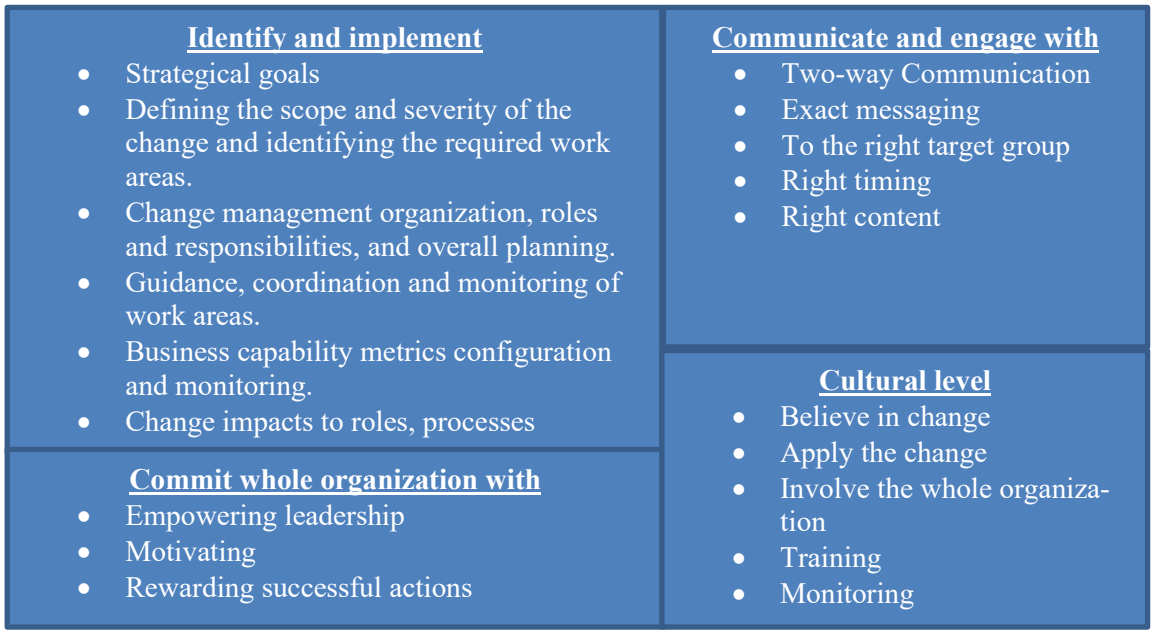

Figure 3 Identified elements of successful change

2.2 Project portfolio management

This chapter moves on to explore PPM more closely. First section 2.2.1 introduces PPM giving an overview of the topic. Second, section 2.2.2 presents the PPM process. Third, section 2.2.3 delves into the early-stages of the PPM process. Finally, section 2.2.4 presents the principles of agile PPM.

2.2.1 An overview

Projects have been defined in several ways. A project can be a one-off task shared by many parties. It is goal-oriented and aims to be completed within a specific timeframe. Projects can also be described as a process, which has a starting and finishing point. (Artto et al. 2006.) It is also said that projects are a non-routine task involving more than one person (Vähäniitty 2012). According to Kloppenberg and Laning (2012), a project is a temporary space in which a unique product, service, or result is created.

A *project portfolio* (PP) refers to a manageable entity of many projects running simultaneously (e.g. Artto et al. 2006, 391; Blichfeldt & Eskerod 2008; Beringer et al. 2013). At the same time, the projects in the PP share the same resources in the most efficient way (Patanakul & Milosevic 2009; Ahmad et al. 2016) and strive to achieve the same strategic goals set by the organization (e.g. Archer & Ghasemzadeh 1999; Beringer et al. 2013). Besides, PP strives to meet the needs of the organization (e.g. Archer & Ghasemzadeh 1999; Blichfeldt & Eskerod 2008). Therefore, the projects selected for the organization's PP are selected following various selection criteria outlined by the company. Furthermore, some projects must be excluded from the company's PP since there are many ideas and projects to be developed. (Artto et al. 2006; Hunt & Killen 2008.) These different selection criteria aim to balance the company's PP in terms of financial and human resources (e.g. Archer & Ghasemzadeh 1999; Ahmad et al. 2016). Moreover, the company's decision-making body selects the projects in the PP and which projects are excluded (Blichfeldt & Eskerod 2008). For companies, this decision-making body can consist of, for example, a board of directors and division heads (Beringer et al. 2013).

Over the past two decades, *project portfolio management* (PPM) has become an essential aspect of management literature (Hunt & Killen 2008). The importance of PPM has been emphasized as global competition intensifies and businesses are increasingly required to develop and maintain operations and to comply with international competition (Killen, Hunt & Kleinschmidt 2008). PPM seeks to balance the types of projects the company develops, their risk levels and the adequacy of resources while maximizing the return on investment (ROI) value while ensuring strategic allocation (Artto et al. 2006; Killen, Hunt & Kleinschmidt 2008; Ahmad et al. 2016). Furthermore, the company strives to manage the resources held by the organization, the dependencies between the projects, and to balance the projects developed by the company following the company's strategic goals (e.g. Beringer et al. 2013; Ahmad et al. 2016).

Thus, PPM is the implementation of a business strategy by controlling the entities of many projects (e.g. Artto et al. 2006). According to Cooper et al. (2001b), PPM is a dynamic decision-making process of a project entity, which is used to develop new products and implement product development by updating projects. However, change projects can also be related to, for example, services, IT, and ICT-systems, external authority requests, or laws (e.g. Blichfeldt & Eskerod 2008; Stettina & Hörz 2014). Effective PPM measures enable initial screening of proposed projects, project selection, and prioritization, resource management, and re-evaluation and allocation of resources and projects during the

development phase (Blichfeldt & Eskerod 2007; Beringer et al. 2013; Ahmad et al. 2016). Accordingly, when addressing projects as a portfolio, the whole is more manageable. Therefore, organizations should be able to successfully manage their projects to be able to respond quickly and externally to external and internal changes. Moreover, companies should increasingly understand the importance of innovation and ideas for business continuity. (Killen, Hunt & Kleinschmidt 2008.)

Thus, PPM is the implementation of a company's business strategy by managing the totality of projects with different methods and techniques. While it is crucial to choose the right projects to be developed, also decisions about projects that have not been developed can be seen as equally important in the PPM process. (Artto et al. 2006; Hunt & Killen 2013, 132.) Also, exploring the PPM process is essential since it is closely tied to the organization's strategic goals, business, mission, and values of a successful corporate organization (Silva & Oliveira 2016). Next, this thesis will move on to explore more closely the PPM process.

2.2.2 PPM process

PPM can be described as the next step towards preparing for future market changes (Bosbach, Brillinger & Schäfer 2020). Thus, organizations are increasingly becoming project-based to operate as strategically as possible (Hunt & Killen 2013, 132). Furthermore, standardization of processes can be considered as one of the critical factors in carrying out high-quality project performance (Sungjoo et al. 2008). Besides, this follows from the operating environment of companies becoming continuously more agile, where changes take place at a rapid pace (Hunt & Killen 2008). Concurrently, according to Rung (2010), companies have too many projects at the same time in their own PP, which burdens the PPM process, operation, and development of the company and that is why companies should invest in the PPM process. Next, the thesis will focus on exploring PPM process success factors.

To succeed in managing a PP, a company should manage a set of many different projects with different tools and methods (e.g. Cooper et al. 2001b; Artto et al. 2006). Besides, Müller and Jugdev (2012) agree that PP links to the organization's strategy, which is a PPM success factor. The PPM process provides a broad perspective on the state of the organization's projects, requiring the commitment of many different internal stakeholders to the process, project evaluation, and linking them to the company's strategy

(D'Amico 2005, 252). According to Sánchez, Mac¸ada and Sagardoy (2014, 54) the projects that best contribute to the company's strategic goals should be the change projects pursued by the organization.

According to Hunt and Killen (2013, 132) the PPM process is a high-level capability in organization where directors actively participate in many decision-making processes, methods, and tools by selecting and relocating decisions and resources within the PP among projects to maximize company well-being and success. Moreover, they found that slowness of decision-making is often correlating to the poor performance of projects. Furthermore, their study reveals a strong correlation between rapid and successful PP internal portfolio decision-making and higher PP performance. PPM processes often include supporting organizational structures such as a *project management office* (PMO) or a *project portfolio management office* (PPMO). The goal of these additional structures is to improve the success rate of the PP by providing projects with a dynamic and responsive decision-making environment that seeks to maximize the long-term value of the organization's PP.

Information sharing can also be a significant contributor to the success of a PP. Information sharing can be seen as an internal, inter-project, or organizational success factor. Moreover, this is linked to the success of the PPM encouraging open information sharing between projects and the organization. (Jiao et al. 2019.) Ergo, Jiao et al. (2019) suggests that open and transparent use of resources and cooperation between projects be increased. In addition to co-operation, the participation of various executives in co-operation is seen as a decisive factor in increasing the quality of management (PMQ = Portfolio Management Quality) in the success of the PP. By also committing to day-to-day operations and collaboration, PP project makers also make more successful PP decisions. However, the process of managing a successful PP involves the following points: risk management, resource management, portfolio balancing, tracking progress, budget tracking, and bringing benefits to the business (Lock & Wagner 2019). From this, it can be deduced that the success of projects depends on many complex factors, such as the interactions of companies' internal operations, different processes, technologies, people, organizations, and cultures (Sa'nchez, Mac¸ada & Sagardoy 2014.) Next, this section moves to illustrate the challenges that companies could face during the PPM process.

In project decision-making, it proves challenging to score projects and choose selection criteria so that projects stay in line with the organization's goals. Also, project prioritizing is challenging; which of the projects secure the future of the company and which

of the projects ought to be ended. (Benko & McFarlan 2004; Sa'nchez, Mac¸ada & Sagardoy 2014, 54.) Besides, one of the challenges in managing and balancing a successful PP is to bring together staff and decision-makers with different qualifications, mindsets, opinions, and requirements (Bosbach, Brillinger & Schäfer 2020).

According to Cooper et al. (2002), the PPM process is dynamic, where the decision of PP is made based on uncertain and changing information. Such uncertainty in decision-making is brought about, for example, by various development opportunities that need to be compared to fit the company's strategy, interdependencies between projects, and the resources involved in projects. However, according to Rungi (2010), the interdependencies of projects have been discussed in the literature from a mostly positive perspective. By dependencies, he means resources, technology, and market dependencies between projects. Furthermore, the research (Rungi 2010) shows that if the interdependencies of the projects are considered, it also means more needed resources. Besides, the results show that a company that considers the interdependencies of projects are more successful, but this still requires more resources around the projects. If a company can take these issues into account in its decision-making, management, and resourcing, it can mean a higher success rate from a project management perspective.

The processes of many companies are not able to support the identification of PP risks. Data availability, the ability to find and manage data, the ability to analyze data improve a company's ability to manage the risk associated with a PP. Olsson (2008, 64-67) suggests three methods to identify PP risks: analyze the disadvantages raised by the projects and how they are reflected between the projects, analyze project data with data from other projects, and finally, include data from all projects in the analysis. By doing the above things a company can improve the efficiency of projects and lower the risks of projects. Identifying portfolio-level trends that another project may have at the same risk will improve processes at the portfolio level. At the organizational level, the same problems can be observed between different portfolios and between different departments and processes. (Olsson 2008, 68.)

Furthermore, the PP should be managed as an investment where some projects have high risks but the potential for high returns. In other projects, on the other hand, the risks are lower, leading to less visible results and income. As with the investment portfolio, a company must accept that some projects will do better than others will. Overall, the PP should live up to the strategic goals set by the organization. (D'Amico 2005, 251.) To help

with this Hynuk et al. (2009) highlights the importance of better tools and ongoing monitoring and follow-up process for the early detection of PP project failures and risks, allowing for quick analysis and correction of project problems.

According to Benko and McFarlan (2004), resources could be used better and more efficiently. The resources of large companies can implement their innovations and experimentally pilot the results within the company in a limited environment. If the pilot experiments are successful, the innovations can be extended to a more significant number within the company. In open innovation, learned lessons and experiences play a crucial role in developing innovations. (Schneckenberg 2015, 17.) Resource allocation strategy for innovation portfolio management increase performance and learning capacity, as resources added to innovation (investing in unproven innovative efforts) pay for themselves and keep the company competitive. Most companies have too many projects running at the same time, resulting in stretched resources that clog the entire PPM process. Furthermore, this often leads to a waste of resources when there is a lack of a transparent management process around portfolio management. (Strategic Direction 2007.)

More attention should be paid to the company's top management in the PP, as companies are increasingly dependent on growth. All projects are at some point in their development innovations, and as a result, successful PPM largely determines a company's ability to innovate and grow. (Benko & McFarlan 2004.) According to Hunt and Killen (2013), most companies strive to use a large part of their innovation activities to develop projects further while reserving some of their resources for longer-term projects. Furthermore, a company's innovation activities are not used to invent innovations but rather to develop existing projects. The desired ratio of the two varies depending on the organization, but most companies report that they do not achieve the desired ratio of new ideas and further change projects.

Companies believe that there are too many short-term and gradual projects in their PP (Cooper et al. 2001a; Killen, Hunt & Kleinschmidt 2008). Indeed, research shows that a good correlation between the balance and performance of different projects in a PP (Hunt & Killen 2013, 134). Next, this thesis illustrates the holistic PPM process in Figure 4

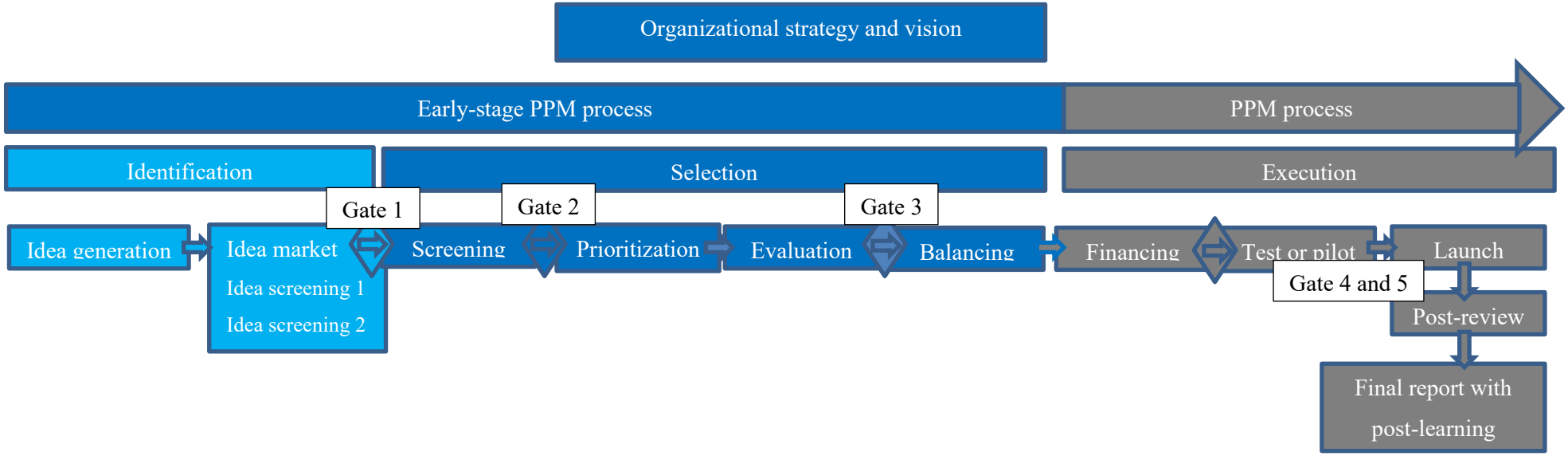

Figure 4 Holistic PPM process (Modified from Killen & Hunt 2010; Bentzen & Christiansen 2011; Dolci et al. 2014; Haya, Kumarin & Subramamiam 2016; Ramakrushna 2017; Strategic Directions 2017; Stettina et al. 2018)

As Figure 4 illustrates, the PPM process has been studied by many different researchers. The figure is modified from multiple pieces of research that are dividing the PPM process into at least three different stages (e.g. Killen & Hunt 2010; Bentzen & Christiansen 2011; Dolci et al. 2014; Haya, Kumarin & Subramamiam 2016; Ramakrushna 2016; Strategic Directions 2017). In general, the PPM process is divided into project identification, selection, and execution. The process is multi-level since projects differ in size, objectives, and availability of resources. For this reason, different projects are required to be evaluated by looking at their unique features. (Dolci et al. 2014; Haass & Guzman 2019.) The PPM process, which records, evaluates, reviews, and ultimately closing projects that are not reproducible, scalable, or profitable, helps to make the organization's investment and resourcing decisions more consistent and helps improve new resource usage (Bosbach, Brillinger & Schäfer 2020). PPM process serves as a means for the organization to align projects with the organization's strategy while ensuring the adequacy of resources in the projects (Beringer et al. 2013; Ahmad et al. 2016).

A Channel process (Strategic Direction 2007) or Funnel process (Cooper 2009) can be built around PPM that effectively eliminates the weakest projects through various decision-making *gates* and evaluations. With the right practices and tools, this approach will achieve the right number of the right kind of projects within the PP, with the right mix of small and large projects as well as projects that provide the best overall value to the company. However, this channeling process must not be too complex, as it can become a bottleneck for projects and prevent them from progressing. (Strategic Direction 2007.) It is important to ensure that PPM decisions support the needs of the organization (Hunt & Killen 2013, 132). The different gates defined for the PPM process help ensure quality assurance and performance comparison for the different phases of each project. At the same time, the gates serve as a natural time to look at redistributing resources by killing or delaying relatively poorly performing projects by freeing up resources for more promising projects. (e.g. Hunt & Killen 2013; Sommer 2019; Cooper & Sommer 2020.) However, projects may also have met all requirements but may not fit current organizational policies (e.g. Cooper & Edgett, 2010; Killen & Hunt 2010). For example, changes in the operating environment, technological changes in demographics or competitors can often affect project survival and expected performance (Hunt & Killen 2013, 134).

It is only in the last two decades that the literature has begun to look at the early-stage of the PPM process, focusing on bringing out ideas (Cooper 2000; Heising 2012). This

enables companies to capture potential and strategic ideas even before the phase of compiling and screening potential projects. Besides, this should make it easier to manage the PP, as the company can budget and predict future consumer preferences. Furthermore, this would allow a company to screen projects at a more fundamental level when the projects are already known at the early-stage. At the same time, the PP can be managed in a more strategy-oriented way, when projects can be considered even before a significant development. (Klingebiel & Rammer 2013.)

Examining Figure 4, more exact, *identification*; at this point, ideas can rise to the company's awareness by many different parties or stakeholders, forming an idea market full of different ideas. These ideas can be either internally or externally generated, for example, by following the activities of the company's staff, development team, competitors, partners, investors, or start-ups. (Cooper 2000.) According to Pennypacker and Dye (2002), Cooper et al. (2000) and (Ahmad et al. 2016) the goal of the PPM process is to maximize the value and balance the PP and besides, link all the projects to the company's strategy and selecting the right number of projects to the PP. In this context, maximizing the value means the process where resources are allocated to the projects in line with financial business objectives, so the expected return on investment (ROI) would be as high as possible.

Furthermore, this can be verified by utilizing a screening process when ideas are still at an early-stage. These business objectives can be e.g. return, fit on the organization's strategy or appropriate level of risk. (Ahmad et al. 2016.) PP evaluation processes include comparing risks, benefits, costs, strategic policies, and interdependencies, and making decisions to terminate and continue projects based on them. Balancing activities include project selection, termination, decommissioning, project risk reduction, resource allocation. (Haya, Kumarin & Subramamiam 2016, 850.)

In the *selection* phase, organizations have various kinds of project ideas. The challenge is to identify the right and the most worthwhile projects for the company, finance, and prioritize the projects to be developed through a standardized decision-making process. (Cooper et al. 2000.) Furthermore, the goal of balancing the change PP is to achieve a set balance between the different projects. This balancing could be done using various evaluation processes. In addition, decision-making gates exploit different parameters, for example: time, risk level, benefits to the firm, and financial investment. Furthermore, investment calculations, financial methods, and various scoring patterns can be affecting factors when maximizing the PP value. (Artto et al. 2006.) Therefore, it is essential to

select the right projects to be selected, financed, and developed. With a balanced PP, the organization can ensure that its portfolio supports the company's strategic policies. (Ahmad et al. 2016.) Besides, balancing the PP is related to a comparison between risks and benefits, and resources and know-how allocation among different projects (Artto et al. 2006).

Since this thesis focuses on the early-stage PPM process between the identification and the selection phase, these topics will next be addressed in detail.

2.2.3 Early-stage PPM process

Early-stage PPM channel process can effectively eliminate the weakest and unsuitable projects through various decision-making gates and evaluations. With the right practices and tools, this approach will achieve the right number of the right kind of projects within the PP, with the right mix of small and large projects as well as projects that provide the best overall value to the company. However, this channeling process must not be too complicated, as it can become a bottleneck for projects and prevent them from progressing. (Strategic Direction 2007.) The early-stage channel PPM process is illustrated next in Figure 5.

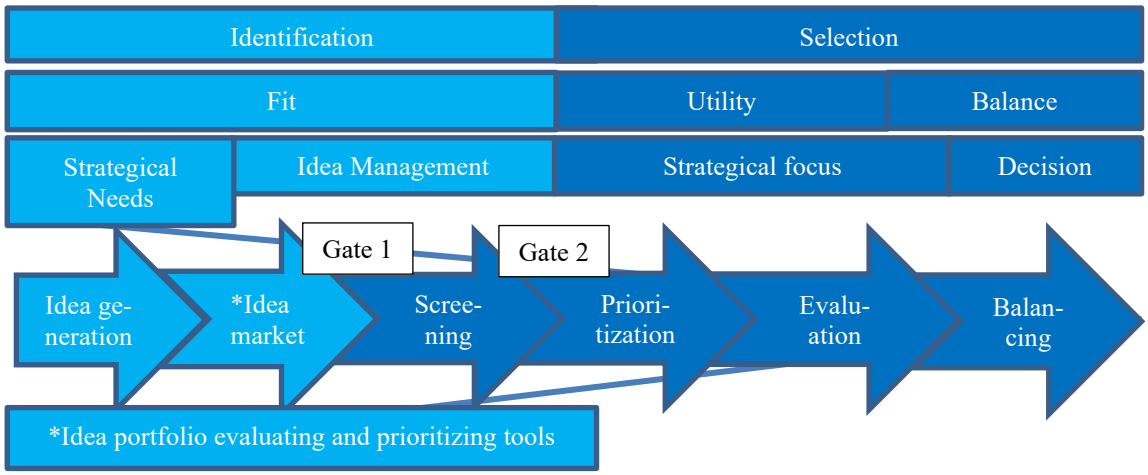

Figure 5 Early-stage channel PPM process (Modified from e.g. Strategic Direction 2007; Heising 2012; Bonazzi & Zilber 2014; Toivonen 2016; Ramakrushna 2016; Cooper 2017)

Figure 5 shows the company's early-stage PPM process. In the figure, the process flows through gated (e.g. Cooper 2017) channel (e.g. Strategic Direction 2007; Bonazzi & Zilber 2014). This is to find projects that fit the company's strategical needs. Here the company succeeds to find the right projects from the formed idea market. (e.g. Toivonen 2016). Furthermore, PP analysis and strategy should be consistent with the short- and

long-term goals of the portfolio nor should new projects conflict with the existing business (Bosbach, Brillinger & Schäfer 2020). According to D'Amico (2005, 252), about 50% of companies do not have a transparent process for selecting and prioritizing projects in the PP and attaching them to the company's strategy. Up to 90% use project financial figures to assess project status, if any criteria are used at all. Today companies are offered many innovation methods such as Synectics (Huesig & Endres 2019, 304) or Thinking Portfolio Software (Toivonen 2016). There are various phased-gate software tools for managing mind maps, brainstorming, and innovations to help with the different phases of planning, process phasing, and PPM (Huesig & Endres 2019, 304). The likelihood of innovation management tools would be more likely to be used if existing tools provided operational support for the idea evaluation process and PPM. However, the study found no interest in using the tool to generate ideas or manage scenarios. (Huesig & Endres 2019.) The study by Haya, Kumarin, and Subramamiam (2016) has identified three significant features that emerge in the early-stage PPM process:

1. Evaluation and analysis of projects according to their riskiness and characteristics, benefits of the project, suitability for the company's PP. (also e.g. Sommer 2019)
2. PPM decisions are based on complexity, criticality, resources, and costs that are aimed at rebalancing, terminating, or strengthening project performance. (also e.g Silva & Oliveira 2016)
3. The importance of setting up an administrative steering group as a factor in balancing project choices and the PP, as well as enabling change. (also e.g.Stettina & Hörz 2014)

To support early-stage idea management, the idea management system "ESS" has been developed. The simple purpose of the system is to compile the mind maps that have emerged in the company to provide the ideas submitted to the electronic proposal box to the system, to display them and organize the ideas. (Chen et al. 2009; Westerski et al. 2011.) Modern idea management systems tend to focus on an idea management process that is well defined, traceable, and reproducible (Westerski et al. 2011). The "idea management" section of the PP includes the core functions of idea management: *functional product development management* and *functional innovation strategy management*. The functional group product development management includes, for example, project ideas,

project development decisions, structured processes, and PPM. Besides, this functional group includes analysis and road mapping of various business projects. (Cooper and Edgett, 2010.) Furthermore, functional innovation strategy management includes support tools that enable PP decision-makers to address strategic issues in the innovation process, such as strategic portfolio management, strategic objectives, different scenarios, and business support functions as a strategy management enabler. (Cooper and Edgett 2010.)

Through project screening and evaluation, the company tries to find out the most *utility* projects for the company from all the projects that have passed the screening phase (Blichfeldt & Eskerod 2007; Beringer et al. 2013; Ahmad et al. 2016). According to D'Amico (2005, 252), 80% of companies do not require a business case from a project that is applying for funding. The company's PP is the result of sensible, collaborative decision-making that can be used to maximize the value of projects for the company. PPM features also include the ability to create, evaluate, and balance different components of a portfolio. An overall picture of the PP is obtained by utilizing various IT tools and databases, to which decision-makers and projects report on the status of projects. (Haya, Kumarin, and Subramamiam 2016, 850.) Killen's (2017) study states that the visual material and network outlook used to support the different decision-making levels of the PP correlate with the better performance level of the PP. The study concludes that visual display of data can improve the quality of decisions related to the PP. The study also presents a visual model to support PP decision-making, the Visual Project Map, to which a visual data view and a conceptual model are linked. Reporting financial figures on the positive effects of organization's project decisions can be cumbersome. However, project decisions can be more easily communicated through qualitative methods, supporting an open culture of discussion and support in decision-making bodies (Idler & Spang 2019, 1035).

Finally, projects are selected for the company's PP using a variety of tools and methods to support prioritization to form a *balanced* PP in line with the company's strategic guidelines (Jerbrant & Gustavsson 2013; Huesig & Endres 2019). Bosbach, Brillinger, and Schäfer (2020) suggest that PP decision-makers be given incentives along strategic lines to persuade them to commit to decisions that benefit the firm. Second, PP decision-makers should have a variety of tools and metrics in place to help them evaluate different projects. Third, decision-makers should also be familiar with the tools and mechanisms used to assist in deciding. Therefore, organizations should have well-established decision-

making processes for PPM, which systematically use, to some extent, the PMO, the Steering committees, and individual projects independently as critical decision-makers (e.g. Stettina & Hörz 2014). According to Sánchez, Mac¸ada, and Sagardoy (2014), a transparent PPM process that integrates a strategy map with IT can enhance the value of organization's IT investment.

However, according to Jerbrant and Gustavsson (2013), the PPM process requires rapid decision-making that can only be achieved through improvisation. According to them, current PPM tools do not provide enough support in a fast-paced "Action space" operating environment. For this reason, it is necessary to examine the "mode of operation" of project leadership, as quick decisions are especially important when making decisions about the necessity, flexibility, and structures of projects. The PP manager also has a responsibility to take care of the organization's projects and the company's overall strategy. Furthermore, Benko and McFarlan (2004) presented that dividing projects into smaller pieces would enable continuous evaluation and prioritization and the risk to be implemented through projects.

According to Jerbrant and Gustavsson (2013), portfolio managers and decision-makers currently must operate based on existing, limited information and manage a portfolio with it. However, research shows that companies rarely provide support to dynamic day-to-day work such as project management, formal standards, templates, schedules, and checklists. In those cases where the PP manager received support for day-to-day operations, he had been criticized for erroneous, incorrect, and irrelevant decisions. Therefore, transparent and interactive communication is a crucial challenge in PPM, but well managed, it can contribute to the success (Strategic Direction 2017). Decisions based on the PP should be made using rational methods while being transparent and ensuring mechanisms to correct erroneous decisions. Rational methods refer to quality decisions that should allow for maximizing project results while minimizing project cost and effort. Decisions should also be based on a fair assessment of all possible options. The decision should have a positive impact on the company as a whole and should not be based solely on the benefit of one department. Transparent decision-making means that decisions about the PP should be transparent, and everyone should understand the criteria based on which decisions were made, who has been involved in the decision-making process, and who is responsible for the decision. It should also be possible for each relevant stakeholder to participate in PP decisions. Error correction mechanisms mean that if there are anomalies or erroneous decisions in the recent decision of the PP, then the company

should have a mechanism to identify and correct these errors. (Idler & Spang 2019, 1035.) The following Table 1 illustrates the company's traditional PPM tools.

Table 1 Traditional PPM tools (Ahmad et al. 2016)

Main Goal of the PPM process	Traditional PPM tools	
Maximize the value of the PP	Financial Models	Real options analysis (ROA), pay-back period (PBP), productivity index (PI), decision tree analysis, net present value (NPV), return on investment (ROI), internal rate of return (IRR), discounted cash flow (DCF), options pricing theory (OPT), earned value analysis (EVA), and expected commercial value (ECV)
	Multi-criteria decision models	Fuzzy logic, Delphi model, market potential, scoring models and checklists, and analytical hierarchy process (AHP)
Balancing	Mapping and Matrix approaches	Bubble diagram, portfolio matrix, McKinsey matrix, and Boston Consulting Group matrix
Achieve strategic alignment of the PP	Strategic approaches	Strategic buckets and maps, and product-technology roadmaps, balanced scorecard
Pick the right number of offerings	Capacity analysis	Pipeline management, resource capacity analysis, and rank ordering projects

Pennypacker and Dye (2002), Cooper et al. (2000), and (Ahmad et al. 2016) have divided PPM into four goals. First, a company should strive to maximize the value of the projects to be developed through PPM. Second, a company should balance its PP, enabling efficient operation. Third, a company should follow its strategic guidelines when making PPM decisions. Fourth, the PPM process should enable the company to select the right number of projects to be developed. According to Haass and Guzman (2019), the academic research literature focusing on the project selection phase is mainly focused on making firm project decisions based on objective criteria. According to their research, more attention should be paid to the subjective features of projects in the project selection process, as today, projects are even faster-paced, more dynamic, more complex, and multi-level. The study suggests that companies choose their selection criteria and tools,

considering the company's strengths, strategy, and constraints that the company or industry may have. These selection criteria should also be made visible to the entire company.

Furthermore, the company can evaluate its PP with real options analysis (ROA), payback period (PBP), productivity index (PI), decision tree analysis, net present value (NPV), internal rate of return (IRR), discounted cash flow (DCF), options pricing theory (OPT), earned value analysis (EVA) and expected commercial value (ECV), which this thesis will not examine in more detail. Moreover, decisions can be made by using multi-criteria decision models, for example, Fuzzy logic, Delphi model, market potential, scoring models and checklists, and analytical hierarchy process (AHP). To balance the PP, the company has the following tools, for example, Bubble diagram, portfolio matrix, McKinsey matrix, and Boston Consulting Group matrix. Finally, the selection of the right kind of projects to support the company can take advantage of using Strategic buckets and maps, and product-technology roadmaps or balanced scorecards. (Ahmad et al. 2016.)

Luiz et al. (2019) have found in their study a strong correlation between traditional portfolio management tools and critical chain (indirect improvement of project management by removing unnecessary constraints/steps/walls) portfolio management (CCPM). The study defined, for example, checklists for PP evaluation and tools for defining financing methods in support of PPM as traditional means. However, the study found that companies used charts modified from the BCG matrix and different bubble pattern the least to support project selection. However, this may follow from companies prioritizing tools in PPM that are simple to implement and are already used in other company functions. Sungjoo et al. (2008) would allow the company to support its strategic planning and the timely implementation of the right projects. With the regularly updated process map proposed in the study, the company would be able to prioritize projects with the help of selected experts and gain flexibility in its processes. Standardization of processes can be considered as one of the critical factors in carrying out high-quality technology projects. They emphasized planning and selection stages from early-stage PPM process where technological needs are identified. Furthermore, by selecting the most urgent needs, assessing the status, drawing up a complementary development plan a company could positively affect the project outcome.

A study by Maceta and Berssanet (2019) found that firms use a variety of scoring and selection tools to support project selection. Also, one company was found to have used a graphical matrix to support its choices. According to Maceta and Berssanet (2019),

project selection and prioritization criteria differ depending on whether the companies are public or private. In the case of private organizations, the choice of PP is more influenced by criteria related to funding, external stakeholders, risk, and strategy, while on the public side, the criteria relate to "social and environmental" and "project components." However, previous research shows that managers of large PP`s face significant challenges in preparing their management and portfolio management. At the same time, managing the PP itself and prioritizing the projects within the portfolio has proved challenging. (Cooper et al. 2000; Jerbrant & Gustavsson 2013.)

Besides, a study of large companies by Benko and McFarlan (2004) has identified three concrete actions that a company can take to improve its PPM. First, by analyzing innovation and managing the early-stage PP, and thereby resourcing to the right projects, a company can achieve better results and increased performance. The analytical techniques they have integrated into PPM re-evaluate the effectiveness and success of projects. Secondly, research has also found that projects selected for the PP are rarely aligned with the organization's strategic goals. Evaluating projects utilizing integrated analysis technology enables rapid prioritization and resourcing of PP changes. Moreover, this enables the company to quickly select projects that fit a strategic vision for development and to cancel or redirect those projects that do not meet strategic goals. Finally, the research identified that technology could also improve a company's short-term project management goals by increasing efficiency and achieving long-term performance by continuously adapting the PP to fit the business. To achieve improved performance, a company must identify projects that fit into plans and continue projects that will allow the company to adapt to rapid change. According to Cooper et al. (2000), successful companies in the PPM process use many different PPM tools to support PP formation, as none of the above tools alone can meet all four goals set for the PPM process.

Although the identification and selection phases of early-stage PPM process have been identified as having a positive impact on project success, many companies lack a transparent and standardized process around it. Furthermore, the companies would also have the opportunity to use different tools to streamline their PPM process but only a few companies use the tools already on the market for managing their early-stage PPM processes.

The next section delves into exploring what needs to be considered when developing an agile PPM process.

2.2.4 Agile PPM

The agility of a company has been studied for more than two decades (e.g. Dove 1999). The basic idea of Agile methodology is that a company acts agilely when it operates openly, supports the staff engaging them, interacts in projects, and makes quick and transparent decisions related to the PP (Silva & Oliveira 2016). Initially, the Agile methodology was created to serve the need for IT and ICT development, where change projects face significant uncertainties, at least initially (Krebs 2019). According to Dove (1999, 19), an agile organization refers to the ability to survive and lead a company in an ever-changing operating environment. Besides, the essential skill for an agile organization is the skill of change. This skill, combined with the right kind of change management, enables a company to succeed. Furthermore, for an agile organization to be able to operate in the current ever-changing operating environment, it must balance the functions and information management related to the change. By information management, he means the skill of managing, in which information within people, the information in different databases, and information connected to different areas of the organization are harnessed to be utilized by the company, balancing them with change management functions, processes, people, and procedures. The following Table 2 illustrates the differences between traditional and agile PPM.

Table 2 Comparing traditional and agile PPM processes (Sommer 2019; Cooper & Sommer 2020)

	Traditional PPM	Agile PPM
Process	Linear process	Constantly repetitive process
Organizational structure	Mixed models	Stable teams and dedicated resources
Business and IT interaction	Waterfall delivery	Continuous delivery
Roles and responsibilities	Floated ownership	Stable ownership
Budgeting and control	Yearly budget	Flexible budget
Decision-making	Centralized decision-making	More decision-makers

Comparing the processes (Table 2), Agile PPM refers to be more flexible and adaptive model (Silva & Oliveira 2016; Krebs 2019), which aims at streamlining operations and developing change projects more efficiently and transparently (Laanti & Kangas 2015). Furthermore, Agile methodology could mean that when two similar projects are started at the same time, the more likely their results are to be different, as the projects have adapted to their environment and challenges and adapted their activities accordingly

(Krebs 2019). Over the last ten years, the idea of Agile has grown to fill more than just software development, and today entire companies can strive to follow the teachings of the Agile methodology. Therefore, companies often combine the already presented PPM stage-gate decision-making model (Section 2.2.2) and Agile methodology using those as a hybrid model. (Cooper & Sommer 2020.)

In agile PPM, the organizational structure is based on committed resources and well-established teams that are trusted and have the mandate to influence decision-making (e.g. Sommer 2019). In an agile model's perspective, the whole process considers the end-to-end. Besides, development in an agile model is the responsibility of the owner, who leads in short iterations to deliver new business for use at regular intervals. (e.g. Stettina & Hörz 2014; Sommer 2019.) Furthermore, this also allows for continuous re-evaluation between the process and prioritization of development tasks (e.g. Ahmad et al. 2016). However, this can be challenging for large companies where there is much overlap in development and multiple projects developed at the same time. In this case, the narrated hybrid model with gate-system thinking may become a necessity. (e.g. Silva & Oliveira 2016; Cooper & Sommer 2020.)

Furthermore, in an agile PPM process, responsibilities and roles are clearly defined between development teams and decision-makers, so that there are no bottlenecks in decision-making (Sommer 2019). At the same time, budgeting has been made flexible within specified limits. The responsibility for the adequacy of the budget lies with the various programs in the PP, for example, concerning small-scale development. Furthermore, this eliminates the most bureaucracy in the decision-making process. (Krebs 2019; Sommer 2019.)

Today, companies are offered many innovative methods to help their decision-making and PPM processes, such as Synectics (Huesig & Endres 2019, 304). Project progress and decision-making in MVPs (Minimum Viable Product) and KPI`s (Key Performance Indicator) can be monitored and promoted using a variety of tools and methods. Technological tools can contribute to the efficient implementation of processes (Duggal 2018, 110). Such digital tools include, for example, JIRA, TFS, CA Agile, Assyst EO, Excel, Microsoft Planner (Sommer 2019), or Thinking Portfolio (Toivonen 2016).

Laanti and Kangas (2015) have divided the need of companies to improve their performance according to the principles of agile methodology into four different sections. First, technology and innovation enter the market faster, so companies need to develop

their operations and prioritize their PP`s at a fast pace. Besides, this is because the operating environment of companies is continuously becoming more agile, where changes take place at a rapid pace (e.g. Hunt & Killen 2008). Second, companies need to continually innovate to stay competitive (e.g. Benko & McFarlan 2004; Killen, Hunt & Kleinschmidt, 2008). Third, the proliferation of cloud technology will reduce corporate transaction costs. Lastly, the market is more unpredictable than ever before, so the company needs flexibility in processes, investments, and capacity. (Laanti & Kangas 2015.) However, according to Hunt and Killen (2013, 134), the organization's ability to redistribute resources between projects reinforces the organization's ability to be truly agile and responsive to environmental dynamics. The agile approach to the organization`s PPM process is illustrated next in Figure 6.

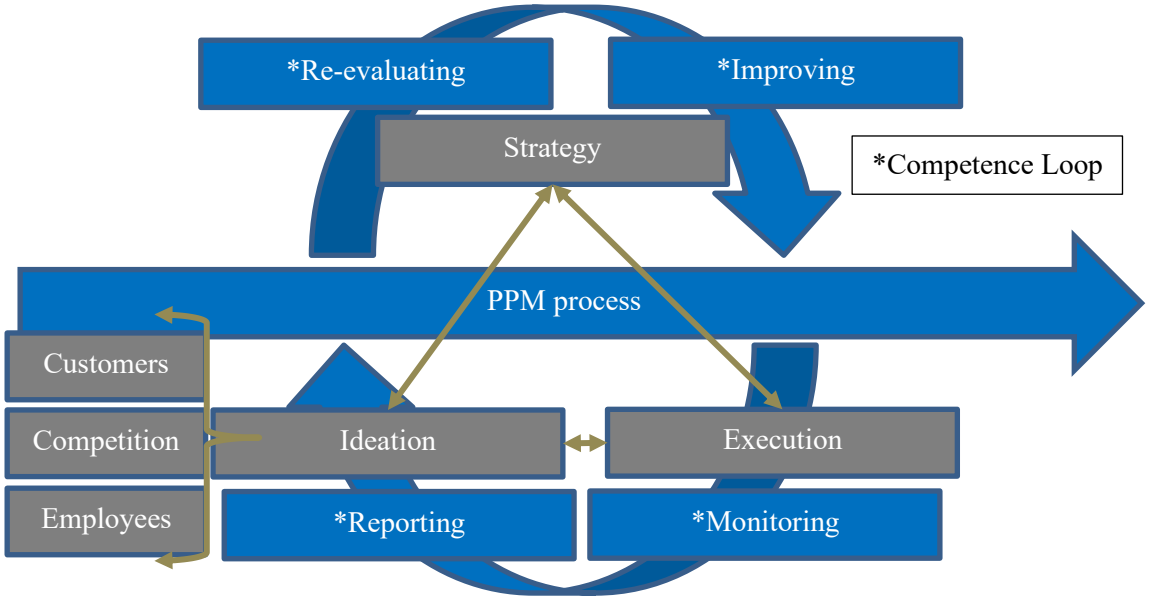

Figure 6 Agile approach to the PPM process (Modified from Hunt & Killen 2013; Stettina & Hörtz 2014; Medina & Medina 2014)

According to Figure 6, agility in the illustrated linear PPM process can be gained from effective PP`s prioritization decisions that can either halt the entire project or enable the company to move agile (Hunt & Killen 2013, 134; Arefazar et al. 2019). According to Stettina and Hörz (2014) the agility is formed by decisions based on a company's strategic guidelines, the implementation of decisions, and ideation that enable the company to respond to competition. Besides, ideas can come from many different places such as competitors, company employees, or customers. On the other hand, the need for development may also be mandatory to continue the business. Such needs may include, for example, reforms related to law or compliance (Stettina & Hörz 2014; Ahmad et al. 2016).

Medina and Medina (2014) present a Competence Loop (Figure 6) that can be exploited around the Agile method. In their Competence Loop by continuously monitoring, reporting, re-evaluating, and improving the progress of the projects in the PP, the company can operate more agilely. Besides, by providing decision-making responsibility to project teams, the organization could reach operations that are more agile. Moreover, with careful time management a company could operate more agilely (Arefazar et al. 2019).

However, according to Dove (1999), decisions related to a company's PP should be made in a strategic decision group formed for that purpose, which would meet and report to it regularly. They would also be responsible for strategic decisions in the PP. In addition, they would facilitate the implementation of project results and seek to share information as equally as possible between projects. This strategic group should also have the most comprehensive knowledge of each change project. The method is also able to provide faster and more transparent results for the entire company. The PP is also implemented among core teams that are committed and implement changes with motivation. Besides, the ability to make radical decisions to continue and end projects also gives organization agility in the PPM process, as several studies show that organizations are unable to stop destructive projects effectively enough (e.g. Cooper et al. 2001a; Killen et al. 2008; Arefazar et al. 2019).

It is only in the last two decades that the literature has begun to look at the early-stage of the PPM process, focusing on bringing out ideas. This enables companies to be able to capture potential and strategic ideas even before the phase of compiling and screening potential projects. Besides, this should make it easier to manage the PP, as a company can budget for projects at a more accurate level of money when the projects are already known at the idea level. At the same time, the PP could be managed in a more strategy-oriented way, when projects can be considered even before a major development.

To conclude, by resourcing and investing in the PPM process the company can increase its performance, efficiency and ensure continuous competitive advantage in this intensifying competitive environment, while striving better towards its strategic goals. There is no additional cost involved in continuously evaluating the PP (subjectively and objectively) and balancing the portfolio to suit the strategy for the company. As a result, projects that do not meet the targets or needs will also be reduced. This will likely improve the productivity of the company as new innovative ideas emerge at a faster pace. How-

ever, this requires a careful round of screening ideas (one or two) as well as many individuals to develop ideas from different departments, management, customers, companies, as well as internal and external innovations.

3 RESEARCH METHOD

This chapter reviews the analysis and data collection methods used in this thesis. These topics are also delved into from a theoretical point of view, and the methods used in the research are justified. First, the chapter introduces the research approach as well as the stages of the research. The research then illustrates the case study and deepens the research problem identified in collaboration with the case company. Third, the chapter moves on to look at the data collection of this thesis and how it was implemented. Fourth, the chapter delves into the phase of data analysis by presenting the different phases of data analysis of this research. Finally, the chapter deals with validity and reliability.

3.1 Case company LocalTapiola

LocalTapiola is a comprehensive financial service and insurance provider with almost 4000 people employed. The company has its roots starting from the 18th century. Over the years, the company has experienced two significant mergers becoming one of the largest financial and insurance firms in Finland, with almost 1,2-billion-euro turnover in 2019 (LocalTapiola 2019a). LocalTapiola Group comprises the Group's parent company LocalTapiola P&C Company, LocalTapiola Life Company, LocalTapiola Asset Management, LocalTapiola Real Estate Asset Management, and LocalTapiola Alternative Funds and 20 regional non-life insurance companies, as well as the companies consolidated through these holdings in LocalTapiola Group's consolidated financial statements. (LocalTapiola 2019b.)

Currently, LocalTapiola has almost 1.6 million owner-customers in Finland. The company is a mutual group of companies owned by its customers and serving individual, farm, entrepreneurial, corporate, and community customers. The company's products and services cover non-life, life, and pension insurance, as well as investment and savings services. They are also a specialist in corporate risk management and employee well-being. Currently, the company is transforming its services from traditional financial and insurance providers into life-long security. Life-long security, in this context, means that they are increasingly investing in producing comprehensive and proactive services to their customers in the areas of health, safety, and the economy. The company strives to be its customers' most important lifelong partner. (LocalTapiola 2020a.) Currently, the company’s PP includes over 100 different size projects within a year from different fields of the business, varying from legal compliances to significant IT and ICT system changes.

3.2 Research approach

This thesis aims to answer the case of LocalTapiola to ascertain the status of their PPM process and to seek how to develop LocalTapiola's PPM process with a focus on the agile early-stage process. The data collected for this thesis is from two different sources: qualitative semi-structured interviews and documents received from the case company. This thesis is a qualitative case study comparing primary and secondary empirical material with existing literature. Therefore, this thesis is conducted as a qualitative single-case study. The qualitative single-case study has been carried out because an individual company has been selected for examination (Eriksson & Koistinen 2005; Puusa & Juuti 2011). However, a qualitative case study is a multifaceted and iterative process that is not necessarily straightforward (Eriksson & Koistinen 2005).

As the purpose of this thesis is to examine the PPM process of this particular company, and it is based on which the research questions, research design, and analyzes have been selected (Eriksson & Koistinen 2005). Besides, qualitative research can form an in-depth picture of the problem studied (Cassell & Gillian 1994). The case-focused ten interviews are complemented by an interview with an external Senior Advisor who has worked on projects and PPM for decades.

The research problem has been defined in collaboration with the case organization. In this case, a semi-structured interview was conducted by asking each interviewee the same or almost the same questions in the same order. However, most of the questions were open-ended and allowed space for the respondent's thinking as well as bringing flexibility to the interview (Cassell & Gillian 1994; Puusa & Juuti 2011). Moreover, qualitative research interviews aim to gain a more in-depth picture of the phenomenon under study and to understand the phenomenon from the interviewee's perspective (Puusa & Juuti 2011). Thus, the researcher chose to conduct the thesis using semi-structured qualitative interviews.

The study can be considered as action research, where the case company aims to find out the current state of their PPM process and self-reflects the findings found in order to improve its operations, processes, and procedures. In this thesis, however, the implementation of the results found and defined is left to the company itself, so the researcher sees the study as a single case study. However, action research would be supported by the view that the researcher acts as an internal consultant, gaining internal insight from the operations and culture of the case company. (Visconti 2010.) Furthermore, the researcher has

not worked around the research topic. Therefore, the researcher came up with an action research -type research strategy to solve the research problem that the company needed. Hence the study aims to solve the problem defined by the company in managing their PP`s (Visconti 2010).

All scientific research has many features in common, such as the fact that research always aims at logical proof and objectivity (Hirsjärvi et al. 2000). This thesis aims to present the results of the research based on the observations from the collected data and not on subjective opinions or values.

Thus, empirical research of this thesis was started by outlining the research problem together with the company. At the same time, the research focused on delving into the topic of PPM based on existing academic literature. After relevant literature, research collection, and outlining the research field, this thesis proceeded to prepare for the implementation of semi-structured interviews by forming an interview framework based on literature and the company`s needs.

3.3 Insider view

The researcher is working for the case company of this thesis. Although the internal perspective has not influenced the results of this research, it is obligatory to consider it whilst conducting the research. Insider view refers to research that has been carried out as part of one's organization or community (Brannick & Coghlan 2007, 59). It is a form of research in which the researcher works or is part of the organization, community, or culture under study and its activities (Eriksson & Kovalainen 2011, 139). There are many strengths and challenges associated with this form of research that the researcher must consider before using this form of research.

There are many strengths and challenges associated with insider view research. The strengths of the insider view research perspective are the ease of collecting data, reports, and data. At the same time, the ease with which interviewees gain confidence is primarily reflected in studies conducted from an internal perspective. Research from an insider view also saves resources such as the researcher’s energy, time, and money. As part of the organization, it is easier to get interviewees when the researcher can contact them directly from within the company. From the inside, the researcher is able to build trust with the interviewees more efficiently and to utilize the relationships created within the company and the information learned from it. In the interview, the researcher can utilize his or her knowledge of the company to have a discussion, which allows the interview to become

more open. The interviewer is also aware of the jargon and culture of the company, so he or she is able to identify more easily with the research topic in the research situation and easily lead the discussion from one question to another. (Karra & Phillips 2008, 549-553.) When considering potential researchers for insider research projects, one must be aware of the strengths and limitations that their business knowledge brings. Researchers can reflexively use their experiential and theoretical knowledge to change their understanding of situations in which they are close. At the same time, the researcher must be aware of the impact of organizational policy on the research process, who are the key actors, and how they can be involved in the process. These questions apply to insider research, regardless of whether the research is conducted in a traditional positivist or hermeneutic state or through intervention research. (Brannick & Coghlan 2007, 72.)

However, conducting research as an internal researcher also brings challenges. Brannick and Coghlan (2007) have divided the challenges of using an internal perspective into four different parts: ease, preconceptions about the company, dual identity, and organizational practices. The researcher works close to the organization, and therefore the challenge may be that the researcher is too close to the phenomenon under study. Furthermore, the researcher may know too much about the company's operations and its weaknesses. At the same time, the researcher can use inside information in interviews. Thus, an investigation conducted as an internal employee may reveal too much about the company's operations, possibly leading to the investigation becoming limited. This can also jeopardize a researcher's job if, as an interviewer, he or she goes too deep into the company's vulnerabilities. Some of the company's employees may also take interviews too in person, affecting negatively on the people around them. (Vickers 2002, 612.) In this situation, the researcher may also develop a dual identity, in which the employee is seen in the workplace as a researcher. Besides, this allows other employees to begin to avoid in-depth conversation with the researcher for fear of their job. The final challenge in an in-house investigation is the secrecy of trade secrets as well as the restriction of the investigation to the company. As the research progresses, the study may also find out things that the researcher cannot bring up. (Karra & Phillips 2008, 553-556.)

With an internal research perspective, a researcher can achieve even deeper and more informative results about what and why companies operate as they do. This is made possible by the researcher's internal role in the company. Besides, this enables the trust that has developed between the whole company and the researcher in conducting the research.

(Karra & Phillips 2008, 553-556). Although this research method challenges the researcher and the ethics of the research, the research material and the obtained results should be treated unnoticed but carefully.

Furthermore, the investigations have raised the question of whether the study examined from an internal point of view can be considered reliable and reproducible. Thus, whether it merely gives an idea of the situation of the company in question. (Vickers 2002, 612.) This research method also emphasizes the caution of handling research material and implementation so that the research does not endanger the researcher's future, those who participated in the interviews or the company's future (Eriksson & Kovalainen 2011, 151; Karra & Phillips 2008, 553-556).

However, the research has not revealed any inherent reason why it would be wrong to conduct research close to a company and therefore it should be further investigated (Brannick & Coghlan 2007, 59). Nonetheless, the results must not contain harmful information about the company or other involved parties. However, this style of research certainly gives an in-depth picture of the company's operations. Thus, results must be able to handle with common sense as well as a reflexive approach, because otherwise, the possibility of conflict is real for the person conducting such research.

3.4 Data collection

Given the insider perspective, the thesis can be considered to have been carried out as the first cycle of action research. The research is conducted between March 2020 and September 2020. The researcher worked in the case company at the time of researching, so he knew the company's operating methods, culture, organizational structure, and processes in advance (insider view presented in chapter 3.3). However, the researcher had to bear in mind that, as a member of the work community, research should proceed on community terms and not rush (Paalumäki & Vähämäki 2020).

The researcher chose the interviews as the method of conducting qualitative research because that would provide more in-depth and diverse content that could be placed in a broader context (Puusa & Juuti 2011). Besides, the researcher ended up with this research method because of the time constraints of the research. In addition, the researcher was able to focus on the need of the company while interacting linguistically directly with the people working with the PPM process in the company. In several cases, the interview is the only way to get through social interaction to gather and listen to the meanings and interpretations people give to things. (Koskinen, Alasuutari & Peltonen 2005, 106-107.)

The researcher gathered empirical data from ten interviews. The interviewees were chosen with selective sampling, where everyone works around the research problem and contributes to the PPM process, so it seemed a natural way to find out the current status, challenges, and future goals by interviewing these individuals. All interviewees agreed to participate in the interview by e-mail. To ensure the anonymity of those who participated in the interviews, the researcher will not share identifying information about them, so the answers cannot be linked to a specific person. The interviews were conducted between May 2020 to June 2020. The interviews were conducted according to the information presented in the following Table 3.

Table 3 Interviewee informations

ID	Interviewed	Day	Length	Type
1	Project Management Officer (PMO 1)	19.5.2020	1h 22min	Teams
2	Project Management Officer (PMO 2)	20.5.2020	1h 30min	Teams
3	Project Management Officer (PMO 3)	27.05.2020	57min	Teams
4	Project Management Officer (PMO 4)	28.05.2020	1h 05min	Teams
5	Director of Information Management	29.05.2020	1h 14min	Teams
6	Senior Advisor	01.06.2020	59min	Teams
7	Director of Business development and innovation	02.06.2020	37min	Teams
8	Director of Group Business and Control Group	03.06.2020	57min	Phone
9	Director of Business Technology	04.06.2020	37min	Teams
10	Director of Development and Renewal	05.06.2020	43min	Phone

The purpose of the interview questions was to maintain the structure of the interview, although the researcher strives for free discussion. Eight interviews were conducted with Teams-app, and two interviews were arranged by phone. Interviews lasted between 37 minutes and 1 hour 22 minutes. The interviews were recorded and transcribed verbatim.

The analysis of the interview material sought to structure the ideas that emerged in the interview about the PPM process while answering the research questions of the research.

For the research to provide a holistic view of the topic under study, the researcher wanted to interview most of the people who work around the research topic daily. However, when the research material is more extensive, the study must also be careful about saturation (Hirsjärvi et al. 2000, 181). Saturation means that the researcher does not decide in advance how many respondents he or she will need and will continue to look for new interviews as long as the interviews bring out something new in matters related to the topic being researched. The data are large enough when the same topics are continuously present during the interviews. However, to avoid oversampling, the researcher selected interviewees from different organizational levels so that each interviewee is a part of the PPM process. At the same time, the interviewees were from different positions and had different backgrounds in management and project management, reducing bias and oversampling. As all interviewees worked at different organizational levels and different stages of the PPM process, their perspectives on the topic were different. Hence, the researcher did not have to think about research saturation and decided to limit the research to ten interviews.

The framework of the interview is presented in Appendix 1. The interview was formed around a research problem. Furthermore, the researcher pre-divided the interview into three different themes formed based on the research problem and the literature. The interview also included questions coinciding the company`s needs. The researcher changed some of the interview questions regarding the interviewee position in the case company, and interviews with two interviewees working at the highest levels emphasized the strategic aspect of PPM. With this change, the research sought to better identify the topic in more depth, as well as the target state and strategic decision-making around PPM.

The researcher conducted all the interviews with Teams-app or by telephone in Finnish. All citations in this thesis have been translated into English and are *italicized* in the text. All interviewees were notified of the recording. The recordings were destroyed at the end of the research. All interviews were spelled almost verbatim. Since the interviews and transcripts contained confidential information about the company's operations, the transcripts were also destroyed at the end of the research. The simplified roles of the interviewees have illustrated with interview ID numbers in the next Figure 7.

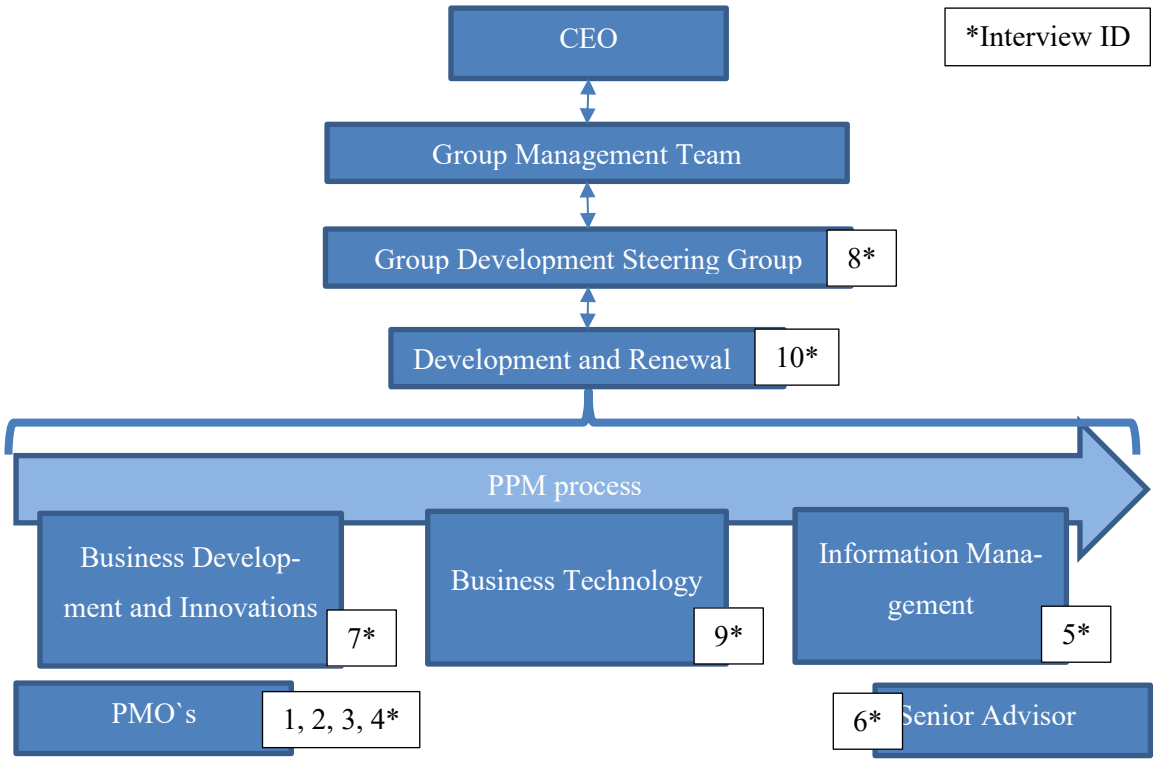

Figure 7 The simplified roles related to the PPM process of the interviewees in LocalTapiola group

The Group Management Team decides the strategic guidelines of LocalTapiola and other matters common to the Group level. LocalTapiola consists of 20 regional companies as well as other business areas. In the PPM process, the responsibility of the *Director of Group Business and Control Group* (Interview ID 8) is to bring to the attention of the service company the desires and actions of these regional companies and businesses so that the company can take the right kind of projects for development.

The task of the Development and Renewal unit is to enable the success of the group's business operations now and in the future by building and maintaining the services used by customers, the tools used by the staff and the system as a whole of the group. The Development and Renewal function produces the projects and entities that are ordered by the group's various functions. The function is managed by the *Director of Development and Renewal* (Interview ID 10). The most significant entities in this unit are business development and innovation, business technology, and information management, which are directed by *Director of Business Development and Innovations* (Interview ID 7), *Director of Business Technology* (Interview ID 9), and *Director of Information Management* (Interview ID 5).

Project Management Office (PMO) (Interview ID 1,2,3,4) is assigned to support and assist projects through the identification and selection process. PMO is also preparing

materials for projects in need of financing to decision-making meetings. Furthermore, the PMO coordinates and monitors the PP together with Development and Renewal unit and acts as decision support in decision-making. From now on, the number following the PMO will describe the ID of the interviewee from Table 3.

The interviewed *Senior Advisor* (Interview ID 6) works at LocalTapiola as an external consultant with extensive experience working in a project environment, and with PP`s, helping other firms in different industries with their significant OC`s and challenges gave this thesis an in-depth picture of PPM. Furthermore, the interview with the Senior Advisor allowed comparing how is the PPM process managed elsewhere.

3.5 Analysis

When analyzing qualitative research, the aim is to find models and produce explanations, for example, with theoretical sampling where the aim is to "explore the dimensional range or conditions" (Piekkari & Welch 2011). There are two of these logics of analysis in qualitative research: inductive and deductive. Inductive is the development of a new model or explanation based on data. In this thesis, however, the researcher has taken advantage of the deductive approach, i.e. a theory-driven approach. (Gibbs 2007, 5.)

In the analysis, the researcher used previous literature, interviews, and documents received from the company. The literature clarified the field of the current PPM in this thesis. From the interviews, the researcher got to delve deeper into the company's PPM process and the excellent and challenging practices that appear in it. By analyzing the interviews, the researcher also got a chance to delve into the company's future goals. The purpose of the documents is to deepen the knowledge of the company's PPM process and to concretize the company's current state and the new state after the OC. The data analysis process conducted is opened in the following Figure 8.

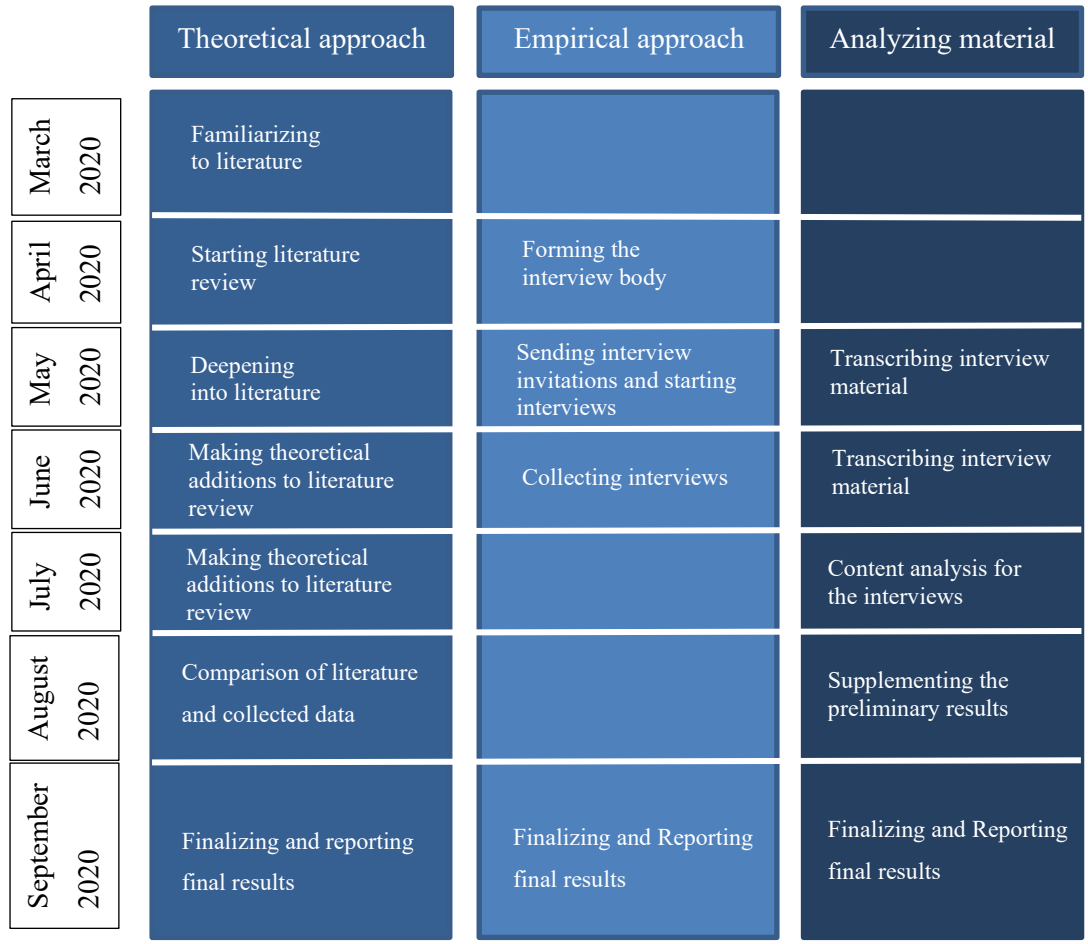

Figure 8 Research process as a figure

After completing and transcribing the interviews, the researcher became acquainted with the data collected. Furthermore, the researcher had already divided the interview questions into different categories based on literature, the objectives, and the aim of the research. Consequently, the data collected had already been distributed accurately in different contents. However, the researcher performed the content analysis by color-coding data (Eriksson & Koistinen 2005) belonging to different categories because, in the interviews, the interviewees answered some questions without asking them about it. Thus, the answers were not under the right category. The different categories were challenges in the PPM process, early-stage PPM process, PP evaluation and prioritization, and agile PPM process. Furthermore, the researcher looked at the novelty value of the research, which has not been studied. Thus, this part of the analysis is the inductive part of the research (Gibbs 2007, 5). However, the research approach is thought to adopt a theory-driven logic. Finally, the researcher began to identify specific themes and concepts that emerged clearly in the interviews and literature review at the same time recognizing similarities and differences in the interviews and received documents (Eriksson & Koistinen 2005).

3.6 Validity and reliability

The concepts of validity and reliability have traditionally been used to assess the reliability of a study (Cassell & Gillian 1994; Puusa & Juuti 2011). According to Cassell and Gillian (1994) and Puusa and Juuti (2011), reliability refers to a situation where the study achieves the same result regardless of the researcher. Besides, a study is valid if it examines a topic identified in the study.

According to Eriksson and Koistinen (2005), the generalizability of the study should be considered in general, and it cannot be achieved in case studies, as it has been implemented by examining only one case. According to Puusa and Juuti (2011), quantitative research is characterized by the fact that it is expected to present generalizable results. The opposite is the case in qualitative research, where generalizability is not even appropriate for a case study because it seeks to study a model, process, or case (Cassell & Gillian 1994). Thus, newly created case studies can either weaken or strengthen the study. Therefore, the case study should be comparable to similar new case studies. For this reason, the case study generally talks about analytical generalization. (Eriksson & Koistinen 2005.)

When the results presented in a study are independent of random and irrelevant factors, the results of the study can be considered reliable. The study should aim for reliability. (Puusa & Juuti 2011.) It is impossible to achieve complete objectivity due to the researcher's assumptions and measures, which affect the results of the research, e.g., in an interview situation. However, objectivity is still seen as one of the fundamental principles of science. (Puusa & Juuti 2011.) The concepts of credibility and evaluability should be considered when conducting qualitative research. In this case, the researcher should convince the reader of the relevance of the interpretations described. Evaluability, on the other hand, refers to the reader's ability to follow the researcher's reasoning and the opportunity to argue different points in the research. (Puusa & Juuti 2011.)

The purpose of this thesis has been to examine the PPM process of LocalTapiola in an honest and open manner. The data collection of this thesis, the disassembly and analysis of the results and the reporting of the results have been carefully executed. However, the research should consider the researcher's inexperience, such as possibly overlooking some relevant topics in the literature review or ignoring some relevant deepening questions in interviews. Furthermore, the research deals with the early-stage of LocalTapiola`s PPM process by way of example. Therefore, the research cannot be generalized to other

sectors or companies of different sizes, with each company being different and organized differently. However, the research seeks to be generalizable in the same way to the same company reliable and valid regardless of the researcher. The fact that the researcher work in the case company should also be considered when assessing the reliability of the research. Besides, the hierarchical position of the interviewee concerning to the researcher may also have influenced the answers given in the interviews. Limited time has been set for conducting this research, and for this reason, this research failed to pilot the interview questions due to lack of time.

To conclude, this thesis has been carried out comprehensively, providing a throughout picture of the management of the PP of significant financial and insurance provider LocalTapiola, including all key people involved in their PPM process in interviews. Thus, the researcher considers this thesis to meet the principles for reliability and validity required for the academic study.

4 RESULTS

First, the research goes through LocalTapiola's PPM process focusing on the early-stage PPM process and delves into the results identified from identification and selection PPM process phases. The presented PPM process will be illustrated throughout the result chapter. Next, this chapter presents the ideas identified in the interviews to make the PPM process more agile. Finally, this chapter reviews challenges identified in the interviews bringing the company's PPM process future improvements into the review as well.

4.1 PPM process amidst an ongoing change

In the interviews, the interviewees constantly compared the current and former state of LocalTapiola`s PPM process because, during the interviews, the company underwent an OC just around the PPM processes and updated its strategy on the first of June. The results only present the state after the OC of the company because it is the state that the company strives for through its operations and changes. The present state divides LocalTapiola`s Development and Renewal department into three different sections: First Business Development and Innovations, second Business Technology, and third Information Management. The best way to summarize the change is as follows.

We have divided our team [Development and Renewal Unit] into three groups… The first group, answering the question, what do we need? ... Then again, the second group is responsible to us for how something is done? Finally, the last group maintains our reforms and is in such in a maintenance mode ... it is our rough division into three, so organizationally this is entirely new to us. We have been trying to remove the communication silos and make sure that we do not always have to invent something new, but that we get the most out of all the technologies. (*Director of Development and Renewal, 5.6.2020.*)

At the same time, with this OC, efforts have been made to make the PPM process more transparent and manageable, taking into account the dependencies as Cooper et al. (2002), Jiao et al. (2019) and Strategic Direction (2017) suggests.

Here the processes have become a bit more transparent, but there is quite a lot still to be done to make it derived as business useful (Director of Business development and innovation 2.6.2020).

The goal of PPM is that we do things the right way, that we take into account the conditions, dependencies and ICT architecture policies ... that we do the right things cost-effectively and in a way that our ICT architecture policies are implemented so that the whole production machinery remains upright and manageable. (PMO 1, 19.5.2020.)

However, growing regulatory and compliance requirements in addition to domestic and foreign competition are driving the company to grow its PP, which according to PMO 2 (20.5.2020) and Director of Business Development and Innovation (2.6.2020), PPM has swelled too large to include more than 100 projects a year. This has led to projects having to be developed and implemented in a hurry, which poses a challenge to realizing the benefits of the projects.

The above-mentioned OC that is implemented at the same time to the case company is also intended to respond to this in order to prioritize the PP better, better manage its inter-project and infrastructure dependencies, and develop the right projects. (PMO 1 19.5.2020; PMO 2 20.5.2020.) Nevertheless, finding a common vision for a large group of business units is sometimes challenging. Overall, PPM needs to be able to prioritize and develop just the right projects (e.g. Cooper, Edgett & Kelinschmidt 2000), which is challenging with such a large and complex PP.

Fairly regularly, there are these regulatory decisions that can then revolutionize its entire PP…At this moment, nothing very unpredictable [is coming to the PP] because law and regulations are known beforehand… more that prioritization should be done at the group level …that is challenging. (PMO 3, 27.5.2020.)

Keep getting those best developed and those who take this company as a whole forward. At the same time, we are becoming a lifelong security company, so it is essential to recognize that surely all these things are going to the same goal and support the progress of the strategy. (PMO 4, 28.5.2020.)

According to Artto et al. (2006) and Hunt and Killen (2013, 132) company's strategy can be leveraged for PPM using a variety of tools and methods. Besides, according to the Director of Information Management (29.5.2020), the updated strategy shows directly how PP priorities are going in terms of renewal and development. The company's strategy can be used to support opinions in development decision-making, which reduces intransitive preferences and concretely bases the strategy. Besides, according to the Director of Group Business and Control Group (3.6.2020), from a development and renewal perspective, LocalTapiola should understand the needs of customers Group companies now and in the future. Eventually, the identified needs are implemented using the PPM process that is utilized throughout the result chapter. Identified LocalTapiola`s PPM process is illustrated in Figure 9.

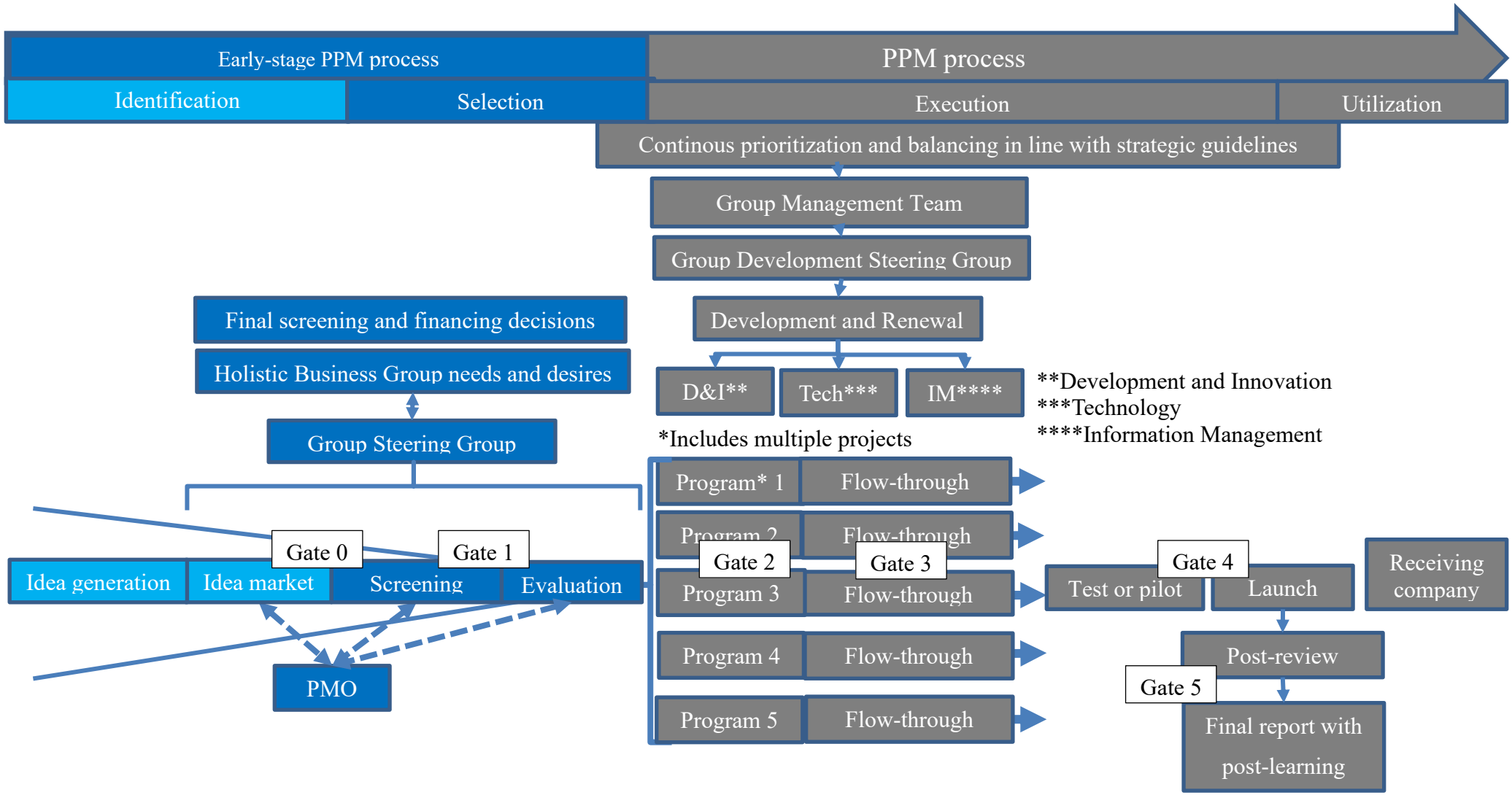

Figure 9 LocalTapiola`s identified PPM process from the interviews

LocalTapiola has divided its PPM process into four parts starting (LocalTapiola 2020b) from the *identification*, continuing to *selection*. After selecting the right project for their PP, the PPM process continuous to the *execution*. LocalTapiola`s PP consists of five different programs, which include multiple projects. Programs are formed based on their interdependencies and resources whilst adapting to the business areas that the program aims to improve. Finally, through *utilization* the company will gain benefits from the developed projects. In LocalTapiola`s PPM process, the early-stage PPM process is described by identification and selection, and that is why this thesis delves into those phases next.

4.1.1 Identification

The PPM process begins with the identification phase, where the aim is to identify new service opportunities and recognize areas for improvement in existing services (LocalTapiola 2020b). LocalTapiola`s identified early-stage PPM decision-making process is illustrated in the next Figure 10. The identification phase is highlighted light blue.

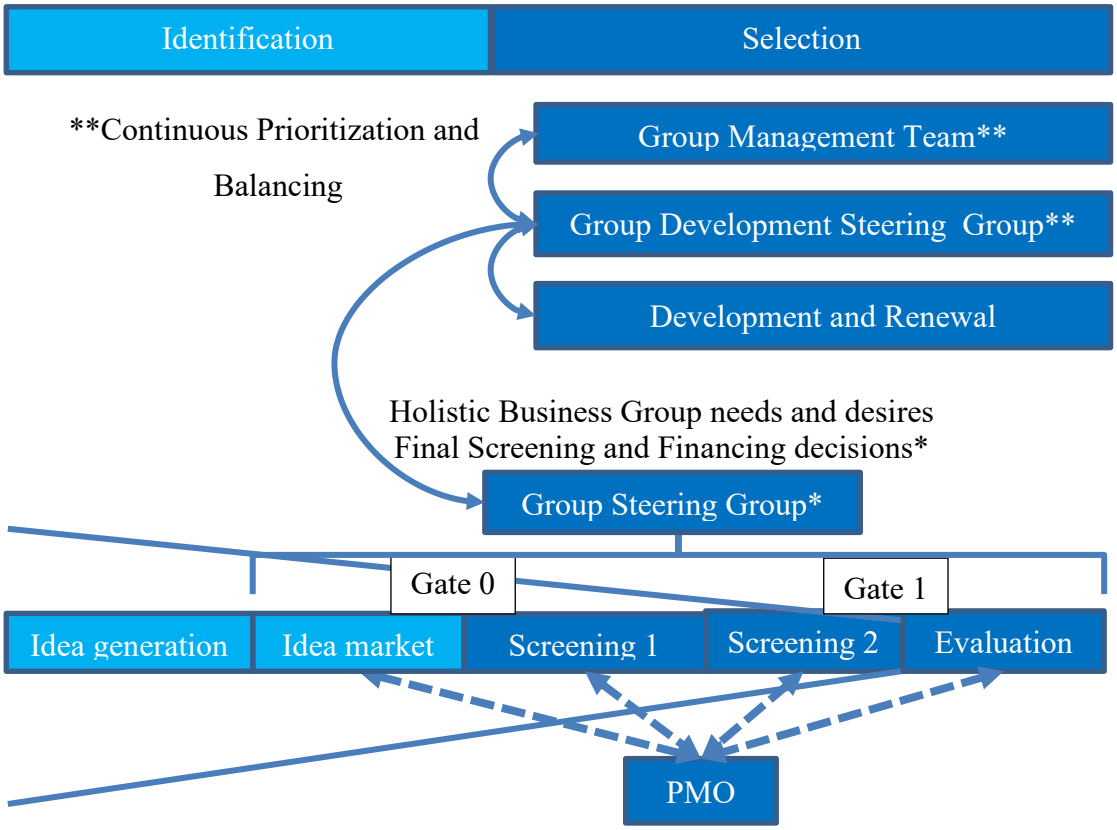

Figure 10 LocalTapiola`s early-stage identification phase identified from the interviews

According to PMO 1 (19.5.2020), ideas can arise from all the Group Businesses.

...Business owners, developers, regional companies, a service company's services such as compensation and insurance services, product companies, asset management, real estate asset management, a life company, and also from a non-life company (PMO 1 19.5.2020).

However, according to Blichfeldt and Eskerod (2008) and Stettina and Hörz (2014), change projects can also be related to, for example, services, IT and ICT-systems, external authority requests or laws. Furthermore, the case company has an ever-increasing program of law and compliance projects.

...with regulatory expansion swell significantly, and it is already enormous now, so it is then a considerable part here [Development and Renewal] (PMO 1 19.5.2020).

LocalTapiola has also sought to establish a clear and defined process around the early-stage of the PPM, like D`Amico (2005, 252) and Strategic Direction (2007) have suggested. However, the case company has not been found to have worked.

Around the early-stage, there have been attempts to form organized early-stage PPM processes. However, those have not been working, because through the process, everyone could share any ideas ... because of this, the ideas presented ranged from significant reforms to small projects ... at some point, this process has been stopped ... Now, I think it goes in a way that someone gets an idea in their head and knows someone to contact through whom they might get their idea forward. (PMO 3, 27.5.2020.)

According to Klingebiel and Rammer (2013), the earlier projects come to the company's attention, the easier it should be to manage the PP, and the more accurately projects can be screened and steered in the right direction. However, LocalTapiola`s efforts are being made to bring about a change in the early-stage PPM process and the idea management with a new organization where the intention is that every idea and project proposal will be pre-screened. Besides, this will be done to ensure that the project payers require that project is in line with the strategy and brings business value. (Director of Development and Renewal 5.6.2020.) Currently, ideas and project proposals are collected from a list maintained by the PMO.

Some of the ideas are in the ThinkingPortfolio tool, and some are in the AnnualClock-application for the Group Businesses. Some ideas can be found in the email ... I think that I currently have the most complete list of project proposals known, and I am not saying it is perfect, but that is what I have got from different sources that have been piled up. (PMO 1, 19.5.2020.)

Furthermore, after the OC, PMO and Business Development and Innovation group will do more cooperation with gathering ideas and project proposals. After the identification phase, gathered ideas are presented to decision-makers for the first time. Next, pre-screening meetings are organized under the PPM decision-making process with the participation of the Group Steering Group. At the pre-screening meetings, the project proposals are reviewed, and the conditions for their progress are examined. Furthermore, if necessary, projects are supported and helped to meet the requirements for the Gate 0. (PMO 1, 19.5.2020.)

The interviews revealed that the company faces challenges precisely with the early-stage PPM process, as ideas can emerge from a wide field. Growing legal and compliance development also brings its challenges to PPM. (PMO 1 19.5.2020). There is no straightforward process for gathering ideas in the case company yet, although the company has tested various processes around it, no functional process has yet been found (PMO 3 27.5.2020). However, a bright and well-defined process would be essential to succeed with PPM, as D`Amico (2005, 252) suggests. Furthermore, LocalTapiola has a tool called ThinkingPortfolio, which, however, has not been used to date to maintain and manage the idea portfolio.

It is intended to create that idea portfolio there in the ThinkingPortfolio tool in the future (PMO 1 19.5.2020; Director of Business development and innovation 2.6.2020).

Besides, an AnnualClock application is used for the company's various Group Businesses, to keep all stakeholders up to date. The application is updated by early-stage project teams, which should take information about their early-stage project, and the information should be constantly updated and maintained as the project progresses. However, this app has only been recently launched, and only 1/10 of the early-stage projects are marked there. (PMO 1 19.5.2020; PMO 2 20.5.2020.)

Besides, the interviews clarified that the PMO and the new organizational decision-making group Group Steering Group manage the early-stage PPM process. In the former PPM process, the ideas have been fully coordinated by the PMO, but it is requested that now the ideas must be made visible to the Group Steering Group at an early-stage.

In the future, this model is such that we are sparring all the ideas before they are put forward ... those must be sparred widely and multidisciplinary (Director of Development and Renewal 5.6.2020).

Accordingly, the ideas can be thoroughly examined and reviewed before selecting the final projects to be included in the PP. According to the interviews, this will be executed by launching previously in the company experimented sparring workshop, where company staff is involved in sparring, challenging, developing early-stage projects, and looking together at early-stage projects, their potential and areas for development. Each early-stage project will also be reviewed by the Group Steering Group, which will pre-screen how to proceed with each early-stage project and whether they correspond to the strategic guidelines defined by the company. (Director of Business development and innovation 2.6.2020.) This review will take advantage of an updated new strategy that defines the company's concrete actions and areas for development to achieve the goals defined in the strategy.

Through the new strategy, we would start to face the challenge of our PPM, that it would be built more in line with its strategic and at the same time that strategy has been made more concrete also in the development part (Director of Business Technology 4.6.2020).

While the new early-stage PPM process is still waiting for its final additions to the process, in addition to supporting, assisting, guiding early-stage projects, the PMO will be responsible for participating in the selection and decision-making of projects to be developed with Group Steering Group. The task of the PMO in the new model will probably also be to prepare the materials for the Group Steering Group and Group Development Steering Group and to coordinate and supervise the projects of the PP together with the Development and Renewal unit. According to interviews, PMO activities should be more proactive and developer-oriented. Before the present model, the PMO had more of

a clerical job, but from now on, more should be done to assist projects in preparation and to identify ways to assist projects. At the same time, the PMO should, on its initiative, be able to identify where in the project preparation they could be of assistance.

According to the interviews in the case company, Group Steering Group has a budget for small change projects, so that not every smaller project and task has to go through a lengthy bureaucratic PPM decision-making process. Furthermore, more significant project decisions are decided to be developed in Group Steering Group. The Group Management Team makes development prioritization decisions for the entire company based on the strategy. This decision is made based on the prioritization proposals proposed by the Group Development Steering Group. Prioritization and portfolio re-balancing are done as needed, even at a rapid pace due to changed situations. (PMO 1 19.5.2020.)

At the moment, we have situation-specific prioritization in force ... under normal circumstances, we would look at the whole of which projects can be progressed through in terms of strategic content and the adequacy of the portfolio budget resources. (PMO 1 19.5.2020)

According to Cooper et al. (2000) and Jerbrant and Gustavsson (2013), PPM and project prioritization is challenging. Based on the interviews, currently company prioritization solutions are most often made for projects already under development. The case company aims to prioritize at an early-stage of the PPM process, but it is challenging, and the company seeks to develop its prioritization processes. The earlier projects become known to the company, the better they can be viewed and prioritized (Hunt & Killen 2008).

Furthermore, according to the interviews, it is also difficult for a company to budget for internal change projects, as mandatory requirements from outside (law and compliance) are generally large, cumbersome, and expensive. However, it is possible to prepare for these requirements even when these law and compliance issues are only being prepared in Parliament. (Director of Information Management 29.5.2020.) However, the company's system infrastructure is so extensive that even such a small requirement from the outside is a considerable investment of resources (financial and time) from the company. (PMO 1 19.5.2020; Director of Group Business and Control Group 3.6.2020.) Based on this, the company also often must prioritize its development portfolio so that resources are sufficient to meet external requirements. Moreover, this has put the case

company in a situation where its development PP has expanded too large, and the company's internal innovation is seen as too small a part of the development portfolio. (Director of Development and Renewal 5.6.2020.) What emerged in the interviews was that the company will be even bolder in prioritizing its change projects in the coming years.

According to the interviews, by clarifying the PPM process, responsibilities, and goals of managing the new PP, the case company aims to streamline and agile the project decision-making process. Furthermore, the company will have more time to move the business forward and respond to growing competition. This will be accomplished by focusing on strategically important change projects and facilitating the company's system infrastructure. Some interviewees felt that a transparent process would be needed at the early-stage of the PPM process, which would not be too bureaucratic. This could be done, for example, by directing the presentation of ideas through already established change networks or networks of supervisors to the Group Steering Group, which would then go through the ideas in more detail in a sparring workshop and look at the project proposals a more detailed level. Already at this point, it would be good to start exploring the possible fit of the ideas to the company's strategy.

The early-stage PPM process could also be improved by making the company's innovation culture more transparent and open, where rejection is ok (PMO 1 19.5.2020).

...and ideas would be more easily brought to the attention of other decision-makers, for example, by calling or arranging short meetings (Director of Information Management 29.5.2020).

The interviews also revealed that an early-stage PPM process does not necessarily need to have any system or tool in place. However, someone must always have a view of what ideas are coming for scrutiny and decision-making, and what projects are currently underway. (PMO 1 19.5.2020; Director of Business Technology 4.6.2020.) However, it would be hoped that the process that will be implemented would be as real-time as possible and provide as transparent picture as possible of the status of the idea portfolio and PP. A monitoring and reporting tool would bring transparency and real-time to the process. (Director of Business Technology 4.6.2020.) In the future, the Group Steering Group and PMO will also better take the needs and desires of the various Group businesses into account. The aim is to achieve this in more detail by discussing with different businesses

and bringing their needs to the fore in a coherent way without personal ulterior motives. (PMO 1 19.5.2020; Director of Group Business and Control Group 3.6.2020.) Furthermore, this should also be considered for scorecards, so that all these efforts are in line with the company's staff and management when thinking about scorecards and support common goals and PPM (Director of Information Management 29.5.2020).

An idea can move forward in the process and obtain a preparation permit when it describes the current state of the company for said idea, what the project proposal is about, and what is the desired outcome. The final output of the identification phase will be the Gate 0 decision-making material, based on which it has been decided whether the preliminary project will continue to the preparation phase or whether it will continue to update and work on its plan. The decision material describes the business promise, business effects, and changes that the business will have as the project develops. At the same time, in order for the company to continue, the preparation should be its business benefits and business model tentative pictures, as well as provide explanations of the resources used by the project (person, time, finances). Besides, the project should describe the customer value achieved through the project as well as required for the preparation phase: roadmap, team, budget, and control. After these, once the project has been reviewed and approved ahead, the project can continue through the identification Gate 0 for the selection phase and Gate 1. (LocalTapiola 2020b.) Next, this thesis delves into the PPM process selection phase.

4.1.2 Selection

LocalTapiola Group consists of many different Group companies and business areas, which also brings a challenge to development decision-making. Although, fulfilling the wishes and needs of businesses is one of the essential tasks in the field of development (Archer & Ghasemzadeh 1999; Blichfeldt & Eskerod 2008). However, the business should be developed so that the company can cope with increasing competition with digitalization and urbanization (Director of Group Business and Control Group 3.6.2020).

Currently, the Group Steering Group is responsible for maintaining an ongoing dialogue between businesses and development. Besides, before evaluating project proposals, the various business leaders in the Group Steering Group will have a significant role to play in having an active discussion with companies and stakeholders at an early-stage. However, according to the Director of Business development and innovation (2.6.2020), it can be difficult because business leaders also have business responsibilities in their area

to get a common understanding from the holistic business. Furthermore, the company should not develop anything nonessential for the regional companies or other business companies to stay in the race. However, day-to-day business views may remain short-sighted and may not identify long-term development needs. (Director of Group Business and Control Group 3.6.2020.) LocalTapiola`s identified early-stage PPM decision-making process is illustrated in the next Figure 11. The selection phase is highlighted in darker blue.

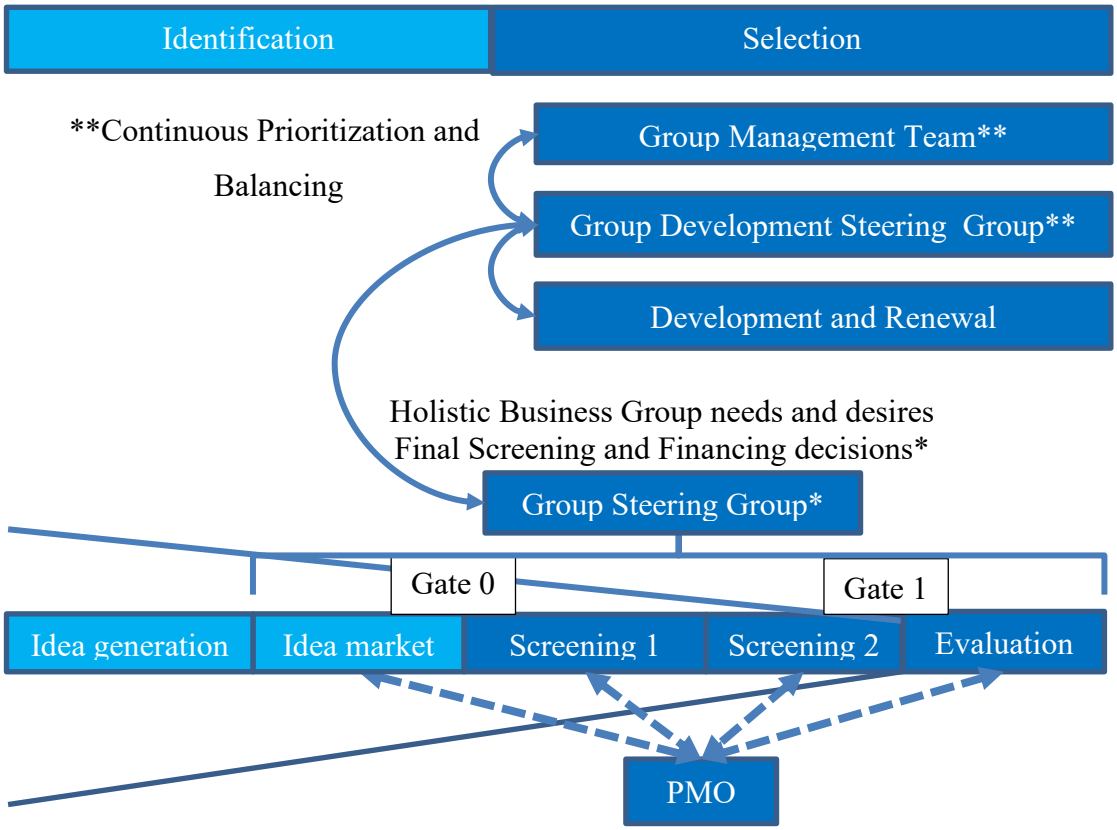

Figure 11 LocalTapiola`s early-stage selection phase identified from the interviews

According to Director of Business Development and Innovation (2.6.2020), the early-stage project proposal should be briefly described, clarifying which idea, how it could be implemented, what it would be like, and how it would be done. Besides, at this stage, the project proposal should clarify how much IT development work is in sight, and then it should dig into business potential. In this way, the idea could already be discussed and seen in what program this could go into, whether this can be done, how fast, and whether this is impossible, as Artto et al. (2006) suggest projects in the case company are controlled as larger entities. Currently, the Development and Renewal department has started to re-organize sparring workshop-type events, where it is planned to go through these new ideas with the team by involving staff in ideation and further development.

… colleagues can challenge and supplement and enrich the idea a bit. At the same time, it is such a preparatory meeting when you have to raise money for it ... it acts as sparring for the rapporteur on how to crystallize and present the idea from the right perspective. (Director of Business Technology, 5.6.2020.)

The screening phase is critical, as its results will be used to decide whether to develop the projects at all. This phase does not yet solve the challenges but seeks an understanding of whether it is worthwhile to start solving the challenge of developing the business. (LocalTapiola 2020b.) A good screening is fast and cost-effective. Besides, the screening means a preliminary review and refinement of the idea, where the project is clarifying the customer or business values for decision-makers.

Next, this business concept is designed, and if at this point in the explanation phase it appears to be a smart thing that this is worth looking at more thoroughly, then fill in Gate 0. (PMO 2, 20.5.2020.)

According to PMO 3 (27.5.2020), the challenge has been to make all the ideas transparent to everyone. However, it is challenging that the company has so many different sizes of ideas.

...maybe the pre-screen filtering is what we lack a little bit - to see that such proposals have been made …why this has been postponed...why this has not been taken into consideration. (PMO 3, 27.5.2020.)

Early-stage screening during the PPM process is contributing to efficient project selection, prioritization, and resource allocation (Blichfeldt & Eskerod 2007; Beringer et al. 2013; Ahmad et al. 2016). However, according to the Director of Information Management (29.5.2020) ideas should not be put too early into the screening, because it is good that people as individuals or as a team promote those ideas. Moreover, projects should not be taken as far as they currently take. Furthermore, if it appears that new value could be generated for both the customer and the business, it is proposed to move from the identification phase to more detailed preparation after Gate 0 (LocalTapiola 2020b). Thus, the early-stage project is feasible in the initial screening; permission is sought to prepare

it. In other words, when a project proposal is found to be such that the project team should start preparing it, then the project team will apply for a Gate 0 permit, i.e. apply for preparatory money for it.

In order for the project to continue, the conditions for progress must be met ... the content of the project is correct and in line with the strategy and that its preparation has been done well enough (PMO 1, 19.5.2020).

According to the Director of Business Development and Innovation (2.6.2020), the insurance and financial sector are such traditional and regulated sectors, and as such, it is challenging to revolutionize the world. However, compared to traditional insurance companies LocalTapiola has competitive ideas.

When the project receives preparatory funding from Gate 0 the selection phase continues. The project team starts concretizing the project. The purpose of this phase is to clarify, by designing and experimenting, what kind of concrete return and benefit the customer could receive, and what concrete benefit and change would result in the business.

Those project goals are always apparent because those project goals are related to the conditions for starting the whole project. We have such a checklist in our project model, which looks at what the conditions for starting are, and if they are not met, then the project cannot start. (Director of Information Management, 29.5.2020.)

In the preparation, the project team is looking for different solution options with an open mind and listening to the customer and the business, and choosing the one that will be implemented. The aim is to formulate the best possible concept for the object under development. (LocalTapiola 2020b.)

During the preparation, the implementation is planned to the level that the resources needed for the implementation [money, time, people] are known, and a cost-benefit calculation can be prepared (PMO 3, 27.5.2020).

For this to succeed, collaboration with potential suppliers is needed. During the preparation, the MVP (Minimum Viable Product) that produces customer and business value

is also defined. In this respect, plans and calculations are presented at a more detailed level. (LocalTapiola 2020b.) Furthermore, The Group Steering Group maintains a dialogue between different Business Groups. The aim is to form a common state of mind for development needs. At the same time, the Group Steering Group keeps the Group Development Steering Group and the Group Management Team up to date on the status of the PP development. (LocalTapiola 2020c.)

According to the Director of Information Management (29.5.2020), the Group Management Team has allocated development money to the Group Steering Group, and the Group Development Steering Group is the place where it is considered how to develop. Furthermore, the Group Steering Group is responsible for what should be accomplished, and the Group Development Steering Group decides how the project could be implemented, how those resources are combined (money and human resources), whilst discussing about the architecture (interdependencies). Following these decisions, the Development and Renewal unit will implement projects under the decisions of the Group Steering Group. Once the project has received execution permission after Gate 1, project execution begins, and the project will be placed on the program allocated to it. Also, Killen, Hunt, and Kleinschmidt (2008) have examined that when the projects are managed as a portfolio or program, the whole PPM process is more manageable.

According to the interviews, project proposal screenings are carried out by the PMO and the Group Steering Group in cooperation under the prioritization guidelines issued by the Group's Management team. According to PMO 1 (19.5.2020), PMO 2 (20.5.2020), and PMO 3 (27.5.2020), the payers of the case company, i.e. the various business sectors that have indicated their contribution to the costs of the project, fund the projects. For this reason, it is important to find out the common state of mind of LocalTapiola's various businesses so that the development of projects finds financing. Another aim of the dialogue is to identify the ordering needs of the businesses.

How many of the business companies are willing to participate in specific projects under development, and to form a common state of mind based on discussions with the businesses (Director of Development and Renewal 5.6.2020).

Therefore, it is vital to find payers for future projects as well, so that development work can continue after Gate 1. At the same time, Group Management is responsible for keeping the Group Development Steering Group and the Group Management Team aware

of any projects that may be developed (PMO 2 20.05.2020). Director of Information Management (29.5.2020) summarizes the responsibilities in the PPM decision-making process.

The responsibility of the Group steering Group is to determine what the company should accomplish, and the Group Development Steering Group considers how it can be implemented and how the company's money and human resources are combined so that they maximize business benefits. The Group Development Steering Group talks about IT and ICT architecture. This is followed by a function of the Group Development and Renewal unit that implements these views. The Group Management Team, on the other hand, has responsibility for the company's overall PP, which means that the Group Steering Group cannot take these decisions forward independently if the projects' five-year cumulative investment and utilization amount exceeds a specific limit. In this case, more significant and strategic projects always go to the highest decision-making body to be in line with the strategy. (Director of Information Management 29.5.2020.)

Once the preliminary projects have progressed through Gate 0, the projects begin to prepare for Gate 1 decision making. After receiving the preparation money after Gate 0, the concrete work phases of the project and the planning of the project as accurately as possible begin. (PMO 2 20.5.2020.) Before obtaining implementation permission after Gate 1, the project team must gain an understanding of the business and customers that the project seeks to influence. Moreover, this is done by conducting both internal and external stakeholder analysis around the project. Furthermore, during the early-stage phase, the project plans different solutions with implementation, possibly builds a prototype from the project to be developed and tests its operation. Besides, at this point the project focuses on selecting solutions and identifying opportunities for further development. The various functionalities of the project are also tentatively planned in this section and how the project will affect the customer experience. (LocalTapiola 2020b.) At this point, the project will take a preliminary report on the business deployments for the AnnualClock application and describe the project's top-level architecture for company reformers and regional companies to see what change projects may be coming in. At the same time, the idea portfolio forms an overall picture of the idea portfolio that can be better managed. (PMO 1 19.5.2020.)

Perhaps even more importantly, from a business perspective, a cost-benefit calculation is made at this point to assess the entire life cycle of the development work and all the benefits and costs. In the calculation, the project reviews the benefits to be achieved by the project, the financial savings, the cash flow brought by the project, and the savings in personnel work. At the same time, the plan reviews the costs going to the project, considering e.g. external supplier and personnel costs. The cost-benefit calculation also includes possible system and labor input costs as well as training, sales, marketing, communication, launch, and maintenance costs. Moreover, the calculation is intended to estimate the payback period of the project. (LocalTapiola 2020b.) According to PMO 4 (28.5.2020), the preparation phase means that the service, solution, or business model is done at the concept level. At the same time, the project forms a road map that shows how big or small the project is. The company's current processes and operating models should be considered very carefully during the preparation phase. It applies as much to business processes as it does to a company’s technical platforms and application development. Furthermore, it is considered which systems will be replaced by the new development and how the replacement will be handled and how the reform will be utilized in the business. The preparation phase is critical because it lays the foundation for the implementation of the project.

Finally, before the next review point, the Gate 1 project builds a throughput roadmap and delimits the MVP for the project. At the same time, the project asks potential suppliers for quotes. Moreover, a checklist of the more detailed content of the task has also been built to help and support the projects. Furthermore, the projects always go through the above points before evaluating and selecting Gate 1. (LocalTapiola 2020b.)

As just described, the final outputs of the preparation in the case company are the overall concept of the project to be developed, the business models, and the MVP described. Also, business models are described and a project implementation roadmap. The benefits and costs of the project can be found in the cost-benefit statement. However, the project has made a process risk and control matrix that takes a position on the various identified risks and their significance whilst aiming to reduce them. In addition to these, the AnnualClock application has exported project information from preliminary launches for businesses. After the Gate 1 decision, the output material is also generated, based on which the project either continues the project preparation, updates the plan, or proceeds to the implementation phase. (LocalTapiola 2020b.)

According to the Director of Development and Renewal (5.6.2020), after identifying the project proposals, the case company is aiming to be able to wide and multidisciplinary sparring all project proposals before those are recorded anywhere. Moreover, this is done to glorify the projects itself. Besides, many of the projects can be combined with another project to get some support. Moreover, other projects may already have done some things, so the project teams do not have to do everything again. Besides, according to Director of Business Development and Innovation (2.6.2020), projects in their implementation proposal in the P1 stage take a position on prioritization, i.e. whether the project is such an option project with either failing or succeeding. Alternatively, is there a secure repayment on the project. The project can also be a so-called pilot, where new things are tried, or it can be done like official work, or the company's license may depend on it.

For a project to progress to implementation, it must have a cost-benefit calculation done, and it should have role-based resourcing, where there are also designated people for each role. The project must also have the Architectural Solutions in order, which means that the project has discussed its suitability for the company's infrastructure solutions at the same time as discussing ongoing services. At the same time, it is important to consider different dependencies, because if projects make overlapping reforms to the systems, everyone should be aware of these. This is also important in terms of timing, even from a launch perspective. For the case company, one of the most important things when preparing a project is its definitions, which must be done in order for the project to be able to genuinely start as soon as permission is granted from Group Steering Group. (PMO 2 20.5.2020.) Once the Group Steering Group has decided on the importance of the projects, Group Steering Group, PMO, and Business Development and Renewal units start going through the dependencies of the project more precisely. In this context, projects will also be prioritized. (Director of Information Management 29.5.2020.)

However, prioritizing projects is difficult because they are all piecemeal good and independently good ideas and can be justified. However, then when they are put in a row or on the same line to take the same money, it is complicated. The equation cannot be rationally solved that it has more variables than what it has constants or those inputs in which case it becomes a matter of opinion (Director of Information Management 29.5.2020)

To improve its early-stage prioritization process, the case company has now updated its strategy to be more concrete. The new strategy could be better utilized to support prioritization.

From strategy, it can be seen directly how these priorities are going. Decisions can be sought to support our strategy and look beyond its entire PP that this project is more important than that. (Director of Information Management 29.5.2020.)

However, according to interviewees, the company has many interdependencies between different systems, processes, and people where the company must think to do the prioritization, and in which development program this change project should be implemented.

In real life, those priorities are tough to make, so all the projects to be developed are just added to the same portfolio. There is much talk about prioritization and dependency management, and it is continuously in our language and to-do lists. However, the fact that they have put them in order somehow in the direction of group development has not succeeded. (Director of Group Business and Control Group 3.6.2020.)

Furthermore, according to the Director of Business Technology (4.6.2020), Compliance or Law projects are those that the company must develop. Then there is the kind of continuity projects that the company is forced to develop because the case company does not want to take any unnecessary risks in compliance and business continuity. Besides, the prioritization process also includes all new ideas and innovations. Of course, those prioritization criteria begin from the strategy. In practice, there are cost-effectiveness, competitiveness, and support for the issues mentioned in the strategy, which affect the development decisions. According to PMO 1 (19.5.2020), prioritization can be implemented in the company even on a tight schedule. Currently, the company's prioritization has had to be implemented on a fast schedule due to situation-specific changes to keep production running. In the current prioritization, production maintenance is the number one criterion, and the second focuses on the significant IT and ICT project and its dependencies. The third is all the authority work, and finally, the company will focus on implementing the company’s internal merger. Under normal circumstances, the company

would view projects through strategic content and the PP in terms of budget as well as the adequacy of resources.

Every spring, the company recognizes as a problem that the money for development has been set aside. For example, this year, the Group Development Steering Group will hold such a qualifying meeting of the development decisions already approved and will try to decide which of the current projects can be suspended or postponed to the next year in order to stay within the budget. (PMO 1 19.5.2020.)

In my opinion, so when you must set aside your page from the budget for that review and initial review of ideas because they are continually going on. It is a bit like the small development for which its share of the budget has been set aside. (PMO 2 20.5.2020.)

Furthermore, the budget is not the only thing that decides the choices in the case company. In addition, a very significant factor is the company's resources and the expertise of experts, which to some extent, must be purchased from outside. (Director of Information Management 29.5.2020.) Currently, LocalTapiola's PP is so large that the company employs many consultants now and, consequently, has its challenges since external vendors and agents do not always know the company well. The case company has tried to bring more substantial own expertise within the projects.

For this reason, they have set up a team of project experts, which the company uses to get people who understand their own business into projects from all over the company. (PMO 4 28.5.2020.) In the future, to facilitate resourcing, many more core teams have been divided into different programs, so that the projects already have human resources ready to implement changes. In other words, the aim in the future is for projects to come to core teams and not for people to be gathered for every project. (PMO 2 20.5.2020.)

Based on the interviews, it is not easy to select and go through the projects to be developed in the company, but projects must meet specific criteria and strategic guidelines. Next, this thesis moves to illustrate execution and utilization phases briefly to get an overall picture from the case company`s PPM process.

4.1.3 Execution

The case company aims to implement projects according to Agile methodologies, in which LocalTapiola is using fragmented project implementation. Furthermore, the com-

pany re-evaluates its operations, changes its operating methods, and continuously develops its work. It can be moved after the start-up decision Gate 1 when the concept of a new service, product, or operating model has been created in preparation, and the project has a set schedule and business objectives (Roadmap), and an MVP delimited based on it. MVP means the smallest functional entity that satisfies the customer's needs and is already starting to generate benefits for the business. The basis for doing Agile in the case company is a list (backlog) of things that the project is supposed to implement. Furthermore, the Product Manager, together with the Product Owner, selects the items to be implemented at any given time. They are prioritized all the time. (LocalTapiola 2020b.) According to the Director of Information Management (29.5.2020), after the recent OC, the new PPM process strives to make the Group Business needs more transparent than in the former PPM process.

Furthermore, transparency is also enhanced by the fact that development prioritization is obtained from Group Steering Group, i.e. how the company does development work in the Development and Renewal unit. In the case company, the change project development process is called the “flow-through model”. This model strives to look at what the company is developing. Besides, it examines what technology the company is using and how the company is developing new projects. The Development and Renewal unit is responsible that all the projects that the case company is developing are really succeeding and that everything is developed efficiently, transparently, and agilely. However, Group Steering Group has a heavy responsibility for not ordering any nonsense projects that the Group Businesses do not need. Besides, the “flow-through model” is described.

In the flow-through model, projects go first to Business Development and Innovation unit ... then to Business Technology solutions and implementations ... then to Information Management there for deployment and ongoing services and consolidation. There are the primary roles of different functions. However, at all stages, there are people from all functions, especially those IT managers, so those have to be involved from the very beginning [when selecting projects to be developed]…because if we talk about dismantling silos that have now dismantled silos between programs then now we are not allowed to build silos between units…we now have to make smart operating models so that we have that PP divided into sensible program entities. They are fixed virtual teams, and then it should be a clear prioritization of entities. (PMO 2 20.5.2020.)

The company does not do everything in the projects itself. However, part of the workforce and expertise is purchased from external suppliers, which are an essential part of the project implementation process. Thus, using external suppliers or consultants to support the project execution may not be easy. (Smits & Bowden 2015, 10–11.)

...part of the workforce and expertise are purchased from external vendors, which are an essential part of the project implementation process. For example, if a project is found to be a significant entity during preparation, it can be implemented in many stages by dividing and defining it, after which the specifications are implemented by instructing and managing an external vendor… However, that is challenging. (*PMO 1 19.5.2020.)*

Moreover, PMO 1 (19.5.2020) sees that the comprehensiveness and diligence of the outsourced definition work is one of the fundamental prerequisites for the success of the implemented and developed project.

When the code is done externally, the supplier's management is crucial for its implementation (*PMO 1 19.5.2020).*

According to PMO 4 (28.5.2020), although LocalTapiola has learned proper lessons from Agile implementation, and even if the implementation of projects could be done agilely, the Group Businesses want more significant entities to implement at once, and not something new every month.

The bigger the project, the bigger the number of employees which you have to train... it is challenging if you have to train the assembler ... However, this does not eliminate the fact that the project could not implement the project agilely with an agile method using technical implementation before its business implementation. (*PMO 4 28.5.2020.)*

In the new PPM process, in addition to the flow-through model, according to Director of Information Management (29.5.2020), the purpose is to form stable core project teams, with which the company seeks apparent internal cohesion and effectiveness to the development process. Besides this, the company strives to achieve better internal and external communication and finding creative solutions to problems.

... the incentive to develop as efficiently as possible ... to reuse existing and innovate. LocalTapiola is moving from the hustle and bustle to appropriately and accurately (Director of Information Management 29.5.2020).

Furthermore, the execution phase is continuously evaluated and monitored when implementation is carried out through checkpoints Gate 2 and Gate 3 (LocalTapiola 2020b). Although managing a complex and broad PP is not always easy, LocalTapiola has already received excellent feedback from external consultants and employees of other companies based on the case company's PPM process (PMO 2, 20.5.2020).

Not always, the company itself understands how good its development processes are (PMO 2, 20.5.2020).

Currently, the company also uses the Business Change Management (BCM) team to a small extent to support the development and business implementation. The case company has been considering expanding the BCM function to cover the entire development of the company by implementing the BCM team to the change project development programs. However, no decisions have yet been made on this at the time of conducting this thesis. Next, this thesis will briefly present the utilization phase to get an overall picture from the case company`s PPM process.

4.1.4 Utilization

The closer the project progresses to deployment and the more complete the projects, then testing begins, followed by acceptance testing just before deployment. After that, we are already in that utilization phase and at the end of implementing business change. (PMO 4, 28.5.2020.)

Lastly, the company's PPM process involves the utilization phase. According to PMO 4 (28.5.2020) comparing to the old PPM and change project development process, the projects are quickly handed over after technical implementation to the business owner of the project. Since then, the owner has monitored, measured, and reported on the success. Before the new PPM process, the case company has also come up with some projects where the project has been terminated too early.

It may be that the project has encountered some challenges that the project should address rather than ignore (PMO 4 28.5.2020).

However, in the new PPM process, a project should be handed over to the business owner only when its benefits (operating models, new role implementations) and launches are well established in day-to-day operations. After that, the project can do its final reporting. (PMO 4, 28.5.2020.) According to PMO 2 (20.5.2020), the actual decision points in LocalTapiola`s PPM process are here in the utilization phase. These decision points are gates 4 and 5, which look at the conditions for completing a project. Furthermore, these points ensure that elected initiatives are executed. Besides, Gate 4 review is performed because the project is not terminated too early, and Gate 5 is the project closure review where it is stated that what was done has been done.

In the new PPM process, this project must not be stopped under any circumstances for that technical implementation. That technical solution may not be entirely stable at that point, but at least at that point, it is not yet commercially established for day-to-day use. (PMO 2, 20.5.2020.)

In other words, its project still needs to ensure that the project hospice care is considered. Furthermore, there should be both technical and business stability and readiness, and that the benefits have been realized. Only then can the project be stopped. (PMO 2, 20.5.2020.) According to PMO 1 (19.5.2020), the change of PPM processes will increase the life of projects in such a way that Development and Renewal unit is responsible for ensuring that the change utilization from development is implemented to the business use. However, the project cannot do more than create and offer the conditions for the desired change. Thus, the project cannot take responsibility for the fulfillment of the conditions it creates, but that is the responsibility of the business units. (Director of Information Management, 29.5.2020.)

...this is the case. Moreover, this requires the commitment of all administrative bodies to work together to ensure that projects achieve the defined benefits. These things need to be taken on goals or even scorecards. (Director of Information Management, 29.5.2020.)

Now that this thesis has gained an overview of the company's PPM process, and next it moves to explore the agility in the case company.

4.2 Agile approach to PPM process

Although LocalTapiola`s projects are already implemented using the Agile methodology, the case company is a very traditional financial and insurance company in the sense that they have complex project entities that are heavy and a little tough to manage. The company also has a way to manage that PP comes specifically through its rigidity. (Director of Development and Renewal 5.6.2020.) However, the case company strives to streamline and adapt agile to the entire company and change the PPM process with the stage-gate hybrid model, as Cooper and Sommer (2020) suggest. Furthermore, discussing the PPM process and thinking about how the process could be made more streamlined and agile produced good ideas for the interviewees.

According to the interview with PMO 3 (27.5.2020), agility is not just for ICT jobs, but agility is a way of thinking that can be applied to just about any task and process. Furthermore, according to PMO 1 (19.5.2020), LocalTapiola should strive to change its internal culture and mindset in a direction where something can be planned and then the idea can be terminated without regret. Second, the company should have a common understanding that it is only after under development major system reforms the company's system architecture is at its most efficient. However, the staff should understand that the duration of this system change is long. The proactivity of the PMO should be more developer-driven and lead to identifying what helps projects and wherein the preparations the PMO can help.

According to PMO 3 (27.5.2020), agility in the PPM process is gained through transparency because the company has many business owners, thus, it may be that two or three places are thinking about the same things from a bit of their point of view. Laanti and Kangas (2015) also see that agility in PPM processes is achieved through efficient and transparent communication. Such transparency would lead to efficiency and the ability to do more things together. Besides, the company should be able to do quick experiments with projects.

That is, we can determine as soon as possible whether this project is worthwhile or not. After all, the teams already, in that case, have to invest some time in the development

of the project, so the PPM process should be transparent and efficient, *which is a systematic activity, everyone knows their role and responsibility. (PMO 3 27.5.2020.)*

Agility in the process would undoubtedly be achieved in such a way that time and money would be allocated to experimentation and ideas in a way, without them having to do the enormous bureaucracy associated with this particular process (PMO 3, 27.5.2020). However, according to PMO 4 (28.5.2020), if projects could be screened more at an early-stage, then it would probably bring a certain kind of innovation and innovative culture to gather the courage to do so, and then try to be bold and passionate at the same time. Furthermore, the fact that people could be more involved in the decision-making and ideation process would make the PPM process more agile (PMO 3 27.5.2020).

In addition, the intention is to bring projects to come to the processes by forming stable core project teams, which is also supported by Sommer (2019). In other words, from such individual point-by-point actions as to such more holistic task and project/program management. (PMO 3 27.5.2020). Director of Information Management (29.5.2020) suggests that LocalTapiola would achieve a more agile PPM process with seasonal funding. In other words, between Group Steering Group and Development and Renewal unit, there would be a budget for a target program or a strategic area. The PPM process would be centralized. Then, resources would be allocated according to different contents. According to Krebs (2019), flexible budgeting would eliminate the most bureaucracy in the decision-making process.

Many projects would be bundled into programs. That is, if each project did not bring its own money, then the process would be more agile because if the money were centralized in something, then we would consider that with this pot, we can get these projects done, then it would be more efficient and agile. (Director of Information Management, 29.5.2020.)

According to the Director of Business Development and Innovation (2.6.2020), the fact that would make the company agile would be that the decision-makers of the organization must be trustworthy. In addition, decision-making should be executed without such a heavy bureaucratic process, but at the moment, this is not quite in sight right now. Sommer (2019) has also stated that the PPM process needs to trust decision-makers with the mandate to make decisions. Besides, agility would undoubtedly be gained by having

a step-by-step process where a project must pass through individual decision-making gates. Furthermore, agility would be gained perhaps with using some tool. However, ideas can be diverse and there might not be a proper tool for that reason. (Director of Business Technology, 5.6.2020.) However, according to Duggal (2018, 110), technical tools can contribute the efficiency to the PPM process. Furthermore, the decision-making gates could drop more and more into the responsibility of the core project teams. In addition, the fact that more significant projects would go through its more ponderous decision-making process, whilst all small projects would go through a different decision-making route would improve the PPM process to be more agile. (Director of Business Technology, 5.6.2020.)

After all, it seems that LocalTapiola is already quite agile while dividing its PP into different programs. Besides, the budget is allocated to the programs for the whole year. Moreover, decisions are made on larger entities and then monitored its progress by the development period. However, not all money should be allocated because you cannot manage that portfolio so that nothing surprising would come during the year. (PMO 2 20.5.2020.)

Finally, this chapter moves to present the challenges identified from the interviews.

4.3 Challenges in PPM process

Lastly, the interviews highlighted many challenges that LocalTapiola faces in the PPM process. In the interviews, the first issue that required implementation was the division of the PP into more extensive programs, which are already being implemented into the company's PPM process. However, the company has estimated that by dividing the project into larger program entities, the dependencies of the different projects in the PP would become more manageable. This is also supported by Krebs (2019) and Sommer (2019).

However, according to the interviewee, this raises a new challenge, where communication between programs and decision-makers should be ensured between programs that run through their flow-troughs. In the new model, transparency and coordination between the company's various programs are emphasized because the company must ensure that the different programs do not differ from each other, but that the dependencies of the different programs are also taken into account. (PMO 2 20.5.2020; Director of Infor-

mation Management 29.5.2020.) While projects are being broken down into larger entities, it was suggested in interviews that the challenge of annual development budgeting could be reduced by introducing flexible multi-annual budgets for which the programs would be responsible. This topic has also been explored by Sommer (2019) and Cooper and Sommer (2020).

Furthermore, according to the interviews, it is challenging to manage the current overall PP (PMO 1 19.5.2020). As a solution to this, the interviewees suggest, for example, the building of core teams within the programs, working in fixed multi-expert teams, which would create efficiency for the project from secure and efficient resources. (Director of Information Management 29.5.2020; Director of Development and Renewal 5.6.2020.) In addition, the interviews emphasized the transparency of the PPM process around the different programs and the decisions made, so that everyone working around the PP knows the criteria that influenced the decision-making of the projects selected in the PP. (PMO 1 19.5.2020; PMO 2 20.5.2020; PMO 4 28.5.2020; Director of Information Management 29.5.2020.) Transparency in decision-making would also be achieved by prioritizing projects by strategic guidelines so that everyone would have information about the decision-making guidelines of the projects to be developed (PMO 4 28.5.2020). However, the case company aims now to improve this with an updated strategy that elaborates the priorities for prioritization more concretely.

One of the significant challenges in the interviews was the stable operation of the production, which may be due in part to the fact that LocalTapiola's system infrastructure is complex and contains many dependencies. Similarly, the company's PP is significant, and with the increasing pressure of the operating environment, projects must be implemented and commissioned in a hurry. (PMO 1 19.5.2020.) However, according to Ahmad et al. (2016) this could be addressed by investing more in project preparation and specifications. In the future, the company will invest in defining preparations for capability.

It is challenging to tell suppliers what the company wants. If the company does not know what it wants, it is almost impossible for an external supplier to produce, for example, the requested service, product, or application. (PMO 1 19.5.2020.)

In the early-stages of the PPM process, it has proved challenging to investigate ideas and learn them in more depth. However, an attempt has now been made to find an answer to this in sparring workshops, which aim to find from the initial ideas the most useful for

the company and which would fit the company's strategic guidelines (Director of Business development and innovation 2.6.2020). Furthermore, according to the interviewee, the early-stage portfolio is the one that allows the company to see the future corporate image and the direction in which the company is going. Blichfeldt and Eskerod (2007) and Beringer et al. (2013) also support the pre-screening of the early-stage PP. Moreover, the structure of the company and finding a shared vision has been challenging because the company's different regional companies operate in such different geographic areas. Therefore, it is difficult to find a solution that suits everyone. (Director of Group Business and Control Group 3.6.2020.) However, the company's new PPM process emphasizes the responsibility of the Group Steering Group, which would aim to introduce the views of the company's various business operations when making development decisions. (Director of Business Technology 4.6.2020.) Accordingly, the company is spending vast amounts of resources on maintaining operations, upgrading existing operations, and external compliance and lawful projects. Resources are scarce for the company, and currently, the company does not have enough those to develop and reform the business operations.

Furthermore, according to the interviewees, the company produces more than enough new ideas. However, with scarce resources and an oversized PP, not all good ideas can even be implemented (Director of Development and Renewal 5.6.2020). Although the company is a relatively traditional insurance company and a financial player, the interviewees also see the company as a renewed company where things are progressing, and projects are implemented mostly successful. (Director of Business development and innovation 2.6.2020.) Furthermore, according to the interviews, the company's project PPM process has developed enormously in recent years, and the entire implementation process has become much more agile and faster than decision-making. Although the PPM process may sometimes seem cumbersome, it has been standardized and found effective. (PMO 3 27.5.2020.)

The interviewees also consider it reasonable that different ideas and project proposals are collected, but the PPM process around collecting and screening blanks lacks a clear process. The company already has a ThinkingPortfolio tool in place for PPM, which the company said could be expanded to view further and facilitate early-stage PPM. Furthermore, this should be supported by a tool that would, at the same time, support reporting automatically and transparently, where everyone involved in the process would receive the same information. (Director of Business Technology 4.6.2020.) Besides, the priorities

set by the Group Management Team are also considered a pleasant and efficient process, which will undoubtedly only become more transparent with the new updated strategy. Although strategy-relatedness was raised as a challenge to PPM, the interviewees also emphasized that the company has tried to invest the strategy-relatedness of projects. Moreover, projects are always thoroughly checked in the decision-making process. (PMO 2 20.5.2020.) Moreover, dependency management is perceived as challenging in the company, attention has also been paid to it, and efforts are being made to reduce the company's system infrastructure and the number of projects to be developed in order to make dependency management more manageable.

To conclude, the fact that the company has received excellent feedback from external consultants, according to which the company's PPM process belongs to the TOP5 category in the country, suggests that the case company's PPM process is good. However, there is still room for improvement in the early-stage PPM process to be more efficient and transparent. Therefore, the case company has decided to introduce an early-stage prescreening process and is considering using the tool to support the early-stage PPM process. The case company is also continually striving to develop its operations more agile, for example, with flexible budgeting and stable core teams.

5 DISCUSSION

The purpose of this chapter is to discuss and compare the significance of the results found in this thesis with the existing literature. First, this chapter is analyzing the current state of LocalTapiola PPM process. Moreover, it is exploring how the literature sees the PPM process. Second, this chapter moves on analyzing what the case company needs to consider when forming an early-stage PPM process comparing results to the literature discussed in the thesis. Finally, this chapter delves into discussing how LocalTapiola can develop their PPM process to be more agile.

5.1 Status of the PPM process in LocalTapiola

The chosen theoretical background for the research defines that the PPM process is divided into at least three upper phases: Identification, Selection, and Execution (Ramakrushna 2017). The following Figure 12 presents a picture of the PPM process based on the literature compared to the PPM process of the case company.

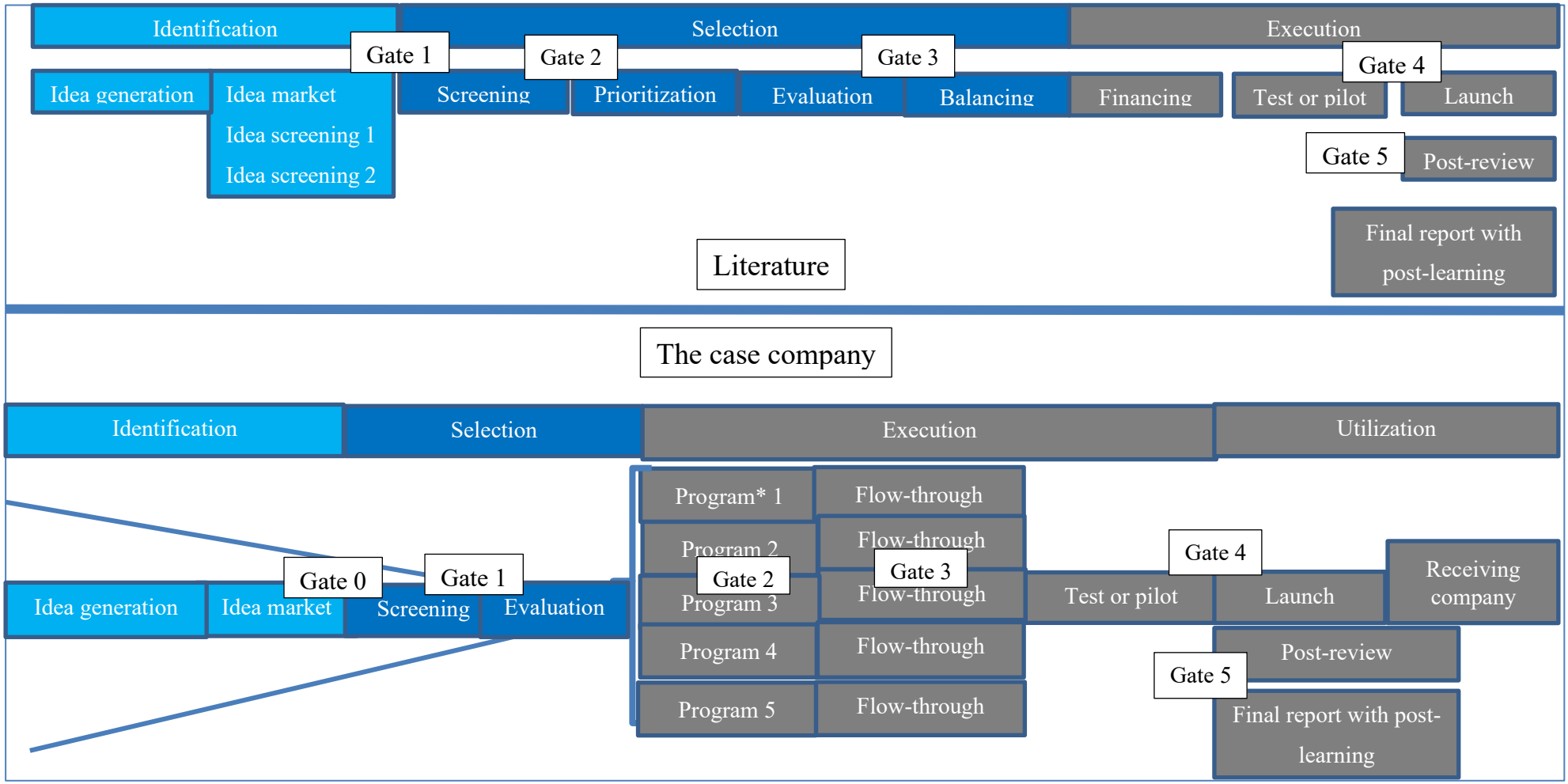

Figure 12 PPM process based on the literature (upper) compared to the PPM process of the case company (lower)

Figure 12 illustrates that based on literature according to Killen and Hunt (2010), Bentzen and Christiansen (2011), Dolci et al. (2014), Haya, Kumarin and Subramamiam (2016), and Strategic Directions (2017) the PPM process can be opened by dividing the upper phases into the following:

- Idea generation
- Idea market
    - Idea screening 1
    - Idea screening 2
- Screening
- Prioritization
- Evaluation
- Balancing
- Financing
- Testing or piloting
- Launching
- Post-reviewing
- Final reporting and post-learning

Next, the researcher reviews the results found in the status of LocalTapiola PPM process and presents comparisons with previous research results in the PPM process. According to the results, the PPM process for LocalTapiola includes the following upper phases: Identification, Selection, Execution, and Utilization. Although LocalTapiola treats the utilization of benefits as one separate phase in the PPM process, it is also included in the literature at the end of the PPM process (e.g. Ramakrushna 2016).

Although the company is going through an OC around the PPM process, and therefore, the results reveal the company's current state of the PPM process as well as the state that the company is striving for. At this time, the case company has divided its PPM process (see Figure 12) upper phases as follows:

- Idea generation
- Idea market
- Screening
- Evaluation and Financing
- The flow-through model with continuous Prioritization and Balancing the PP

- Testing or piloting
- Launching
- Post-reviewing
- Final reporting with post-learning

The PPM process presented in the literature is closely identifiable from LocalTapiola`s PPM process, although differences can be identified. Overall, the case company's PPM process should support the company's strategic goals while developing the business in this growing competition (Hunt & Killen 2013, 132). However, it seems that the case company's resources go to the continuous maintenance of the business and the fulfillment of the requirements of third parties. In contrast, new business creation and project development are left behind.

We have an ever-growing PP that comes from that side of Law and Compliance… now, to keep our production afloat, we have this situation-specific prioritization in place. (PMO 1 19.5.2020.)

Currently, the challenges of the company's PPM process are addressed at the beginning and end of the process.

There [early-stage PPM process] perhaps we still lack such a formal or such a process that everyone understands (PMO 3 27.5.2020).

In part, this is certain, because the company is changing its PPM processes, so the roles and responsibilities of PPM are not yet to be secured. Second, the company's PP is extensive and complex, including over 100 developed projects within a year. Therefore, it is impossible to complete every project proposal.

Our project management has swelled a bit too large (Director of Development and Renewal 5.6.2020)

As the company's PP is large and complex, projects should be prioritized even more boldly (put on hold and terminated if the project does not go well), which is also supported

by a study from Haya, Kumarin, and Subramamiam (2016). Thus, the company could find ways to reduce the number of projects in the PP, for example by creating larger programs (Krebs 2019; Sommer 2019), while prioritizing the projects to be developed for the company from the most important to the least important (Benko & McFarlan 2004; Sa´nchez, Mac¸ada & Sagardoy 2014, 54).

Moreover, forming and managing the overall picture of the case company's idea portfolio seems challenging now, as the established process seems exhausted from the early-stage of the process. To improve this, the company could consider expanding its current ThinkingPortfolio into idea portfolio management, or if the market has a tool that can report project key figures and status in real-time, it will certainly drive the company's needs even better (Strategic Direction 2007).

It is a pretty manual [LocalTapiola`s PPM process] now... if it were some smart tool ... then it could be helpful ... However, many times that tool distorts that process or the tools it brings with it is its process, then that tool is maybe such that it may not suit us. (Director of Business Technology 4.6.2020.)

Currently, the company prioritizes most of its projects only when the projects are already in the implementation phase. Prioritization and thorough review of projects should be done already when projects are at the idea level, as Klingebiel and Rammer (2013) and Cooper et al. (2000) suggest. However, in the future, the case company is aiming for early-stage prioritizing through a sparring workshop.

The sparring workshop will be revived ... we will go through these new proposals with the group and sparring and see what ideas can be found there. At the same time, colleagues can challenge, supplement, and enrich that idea a little. (Director of Business development and innovation 2.6.2020.)

The company's PPM process would seem clear and concrete if the last roles and responsibilities can be agreed upon in the process. The company's decision-making model seems to work by the fact that the Group Management Team sets strategically important prioritization decisions as well as broad guidelines. Furthermore, Group Development Steering Group presents prioritization proposals to them. Group Steering Group, on the other hand, is a new decision-making body for the case company, which seems to be a

desired addition to the company's PPM process. As the Group Steering Group is at the beginning of the PPM process as the recipient of the group business ideas, it should also take responsibility for the PPM process holistically, as the company now has in mind.

In addition, the company's new PPM process should intend to make staff and factor-level people responsible for preparing project decisions and sparring, proposed by Cooper and Sommer (2020). However, this is already being implemented by the company, although there is room for improvement. The role of the PMO seems to have remained more on the administrative level before the new PPM process model. However, the new PPM process allows the PMO to support and assist with projects, to make operations more proactive. This was also seen as an essential issue for the PMO. Also, it is highly supported by Hunt and Killen (2013, 132), that says the PMO`s goal is to improve the success rate of the PP by providing projects with a dynamic and responsive decision-making environment that seeks to maximize the long-term value of the organization's PP.

At the same time, it seems that the role of the PMO in the new model continues as before, i.e. the PMO will continue to be closely involved in project selection and decision-making. They continue preparing the materials for the Group Steering Group and Group Development Steering Group. Moreover, PMO coordinates and supervises the company's PP together with the Development and Renewal unit.

Finally, even if the company's entire PPM process is functional, the completed projects should be successfully implemented in the business for the company to achieve the business benefits it wants. This also proved challenging in the company.

Projects or Programs can enable the ability to automate…they may allow the ability to channel shift, but they cannot implement it…that implementation is the responsibility of the business units. (Director of Information Management 29.5.2020.)

For this reason, it might be a good idea for the company to make more use of the BCM team to assist in the realization of benefits between businesses and change project programs as Smits and Bowden (2015, 18) and Strucman and Yammarino (2015, 34) and Rosenbaum et al. (2018, 296) suggest.

As already sidelined here, the early-stage PPM process still appears to be without a transparent process for the case company. For this reason, the results of the early-stage process will be discussed in more detail next, reflecting on the literature review.

5.2 Implementing a comprehensive early-stage PPM process for LocalTapiola

Next, this chapter analyzes the second essential aspect of the thesis, considering what the case company should consider when implementing an early-stage PPM process daily. Currently, it is challenging to manage the early-stage PP for the case company.

That implementation portfolio is showing us the current state of the PPM. Nevertheless, from the early-stage PP, we can see whether we are going in the direction of the strategy and what is missing from the PP. In other words, we should make that content visible, and at the same time, it is such a Cultural Challenge for us also. (PMO 1 19.5.2020)

LocalTapiola comprehensively gathers ideas in one place in the PMO and under the Group Steering Group. According to Huesig and Endres (2019, 304), around the collection of ideas and their management could be facilitated by the introduction of a comprehensive management and reporting tool where possible, utilizing their existing tools. However, according to the Director of Information Management (29.5.2020), the most crucial thing in idea management is that the company has agreed with roles and responsibilities. Moreover, the company must always have an overall picture of the PP and idea portfolio. Nevertheless, the company has an established process around PPM. However, the challenges of the early-stage PPM process of a company seem to start with going through the ideas market, which seems to lack a transparent process. However, a bright and defined PPM process is necessary for overall success (D`Amico 2005, 252; Strategic Direction 2007).

Many ideas are coming, but the beginning should be pre-screened better (Director of Development and Renewal 5.6.2020)

The case company has sought to respond to this by launching a sparring workshop concept that seeks to review early-stage ideas weekly. This is also supported by Cooper and Sommer (2020). At the same time, in the sparring workshop it is possible to refine the idea further by challenging and deepening the idea together. Those who wish may participate in the event, but there is at least a whole Development and Renewal unit.

Interviews often highlighted the challenge of finding a common vision for group development. This challenge the company has sought to solve by setting up a new Group Steering Group decision-making body to bring together the different views of all businesses on development for decision-making and to engage those in an ongoing dialogue with businesses on their needs and desires. It is difficult for the company to operate if it is unable to identify the essential areas strategically for development (Livne-Tarandach & Bartunek 2009, 8).

There are so many different desires among businesses, so it is hard to pull it into something somehow easy, predictable, and straightforward (Director of Business Development and Innovation 2.6.2020).

According to (Director of Group Business and Control Group 3.6.2020), LocalTapiola`s PPM early-stage decision-making process is a bit heavy but functional and strategy based. However, there is a constant rush in business development (PMO 1 19.5.2020). Furthermore, this is reflected, for example, in the rush of preparations and project specifications, in which case external suppliers and programmers do not know what they are doing and what the company wants and needs since the company has not been able to prepare the project properly. As the status of the idea portfolio shows the future direction of the company, the case company should strive to improve its idea portfolio by prioritizing the ideas better in its portfolio from the outset. Moreover, the company should only focus on projects that are being developed and supported by the strategical guidelines. However, such tighter prioritization should not reduce internal innovation and the presentation of ideas (Killen, Hunt & Kleinschmidt, 2008). Thus, decisions should be taken as transparently as possible so that everyone is aware of the basis on which decisions on projects to be developed are taken. This was also emphasized in the interviews.

According to the interviewees, transparency appears to be an essential part of the entire PPM process. However, according to interviews, transparency in LocalTapiola`s PPM process should be developed. According to the interviewees, transparency refers to a well-defined and precise process that is familiar to everyone. In the process, the decisions of the projects selected for development are made transparently, and the criteria for prioritizing them are known to everyone. Every decision should be committed to the strat-

egy and benefit the company and the business. Transparency can be improved, for example, by clearly integrating the criteria that influence decision-making into the company's strategy (Laanti & Kangas 2015; Strategic Direction 2017).

In addition, full transparency requires a change in the corporate culture, where presenters of ideas are aware that projects are developed based on which criteria, and it is perfectly fine to be prioritized. Furthermore, this is done to enable the company to develop more suitable projects. Decisions need to be transparent for everyone, and culture needs to be made more open to make staff dare to talk openly about every project. Moreover, the case company should grow a culture of experimentation and failure. (Cooper, Edgett & Kelinschmidt 2002; Schneckenberg 2015, 17.)

The Interviewees often emphasized the dependencies of the different projects and programs selected in the PP. Beringer et al. (2013) and Ahmad et al. (2016) have also identified a similar phenomenon. They have studied that a company may, in the worst case, waste its resources and money without being aware of the interdependencies between projects. Although the case company is aware of the challenging management of dependencies, it is difficult to answer or solve it because some dependencies are only identified during the execution phase of the project, and it has not been possible to prepare for them.

There are many dependencies in the PP, and therefore the dependency management is one of the crucial parts of the early-stage PPM as well (PMO 4 28.5.2020).

LocalTapiola`s challenge has been at its early-stage PPM processes. Therefore, the case company should consider managing its early-stage PPM process, as illustrated in Table 4.

Table 4 Important principles when implementing the early-stage PPM process

Project screening
• Comprehensive idea proposal screening • PPM overall management responsibility by someone • Tools that enable real-time and accurate PPM • Involvement of staff in decision making
Preparation
• Careful preparation of project proposals without haste • Finding a vision for the joint development of a group of companies • Prioritizing the projects to be developed with a stricter hand at an early-stage • Careful preparation of specifications required for the project and management of suppliers
Strategical decisions
• Concretization of the strategy on which development choices can be based • Development decisions should be based on the company's strategy and create added value for the company
Dependencies
• Careful identification and review of dependencies at an early-stage of the idea proposal • Coordination of dependencies also between different programs and experts
Transparency
• Transparency in decision-making criteria • Changing the corporate culture so that one dares to propose and try different ideas, but there is no fear of failure and becoming prioritized • Creating an established process where everyone knows what is expected of the project and what the decisions are based on

5.3 More agile PPM process

Lastly, this chapter focuses on reflecting the ways found in the interviews to make Local-Tapiola`s PPM process more agile by comparing the results with previous research.

In a company, agility can mean more than just the Agile methodology, which has become familiar in the IT environment (Krebs 2019). According to Sommer (2019) and Cooper and Sommer (2020), the agility of a company's PPM process can come from the following things, for example:

- Through continuous project evaluation and response
- Through re-evaluation, improvement, monitoring, and reporting of its practices
- By making decisions based on strategy, implementing projects through a standardized process, and continuously coming up with new ideas
- By keeping a close eye on the process of customers, competition, and employees
- By setting up stable teams that are dedicated to the development and dare to voice their opinions
- By identifying stable project ownership
- By defining flexible budgeting for projects
- By involving more staff and employees in decision making
- By continuously implementing and delivering projects for business use

When asked what makes LocalTapiola's PPM process agile and how to improve it further, the answers varied greatly. LocalTapiola's PPM process is streamlined and well-established, but the PP will only be appropriately prioritized and balanced once the projects have been selected as part of the PP. However, the company has yet to ensure the responsibilities and precise roles of the new PPM process. These are, however, a work in progress. Agility, to its PPM process, would thus get from the continuous evaluation and review of the idea portfolio (Blichfeldt & Eskerod 2007; Beringer et al. 2013). This would also seem to be an attempt by the company to concentrate more closely on the pre-screening and prioritizing process.

According to Kotter (1996), Siggelkow (2001, 838), and Todnem (2005, 370), the company should develop its business through internal and external stakeholders. In ideation, LocalTapiola uses ideas received from within the company and from external parties. However, the company could invest even more time and resources in this by following the world's technological developments even more closely, as the ideas and thoughts

obtained from there will undoubtedly pay for themselves. Not all knowledge is in the company itself (Cooper 2000; Moran and Brightman 2001, 111).

LocalTapiola has also considered moving to stable teams to achieve efficiency in project development when it does not take so much time to move resources from one place to another. Thus, the cohesion of teams is strengthened over time. However, this requires a committed team, so it is advisable to consider a comprehensive reward system for success around team building (Struckman & Yammarino 2003, 26).

Sommer (2019) suggests that a firm should continuously implement changes to business use to be agile. LocalTapiola has such a large and complex PP that not all the group businesses can take new changes regularly, which is why the company has decided that technical implementations can be done agilely and fast. For businesses, the OC`s are brought in larger pieces so that the change has time to be implemented in the businesses. However, the company should simplify and focus its PP on projects that are essential to the company and strategically important projects in order to make PPM more effective (Stentoft, Freytag & Thoms 2015; Silva & Oliveira 2016; Jiao et al. 2019). With this, the company would be able to start implementing its new development model more agilely and efficiently (Sommer 2019).

Besides, the interviews also highlighted the flexible budgeting proposed by Sommer (2019). Flexible budgeting in the case company could be implemented by spreading the development budget over many different years and sharing the responsibility for the use of the budget with the PP program owners. Therefore, no resources would be spent each year on the preparation of the new budget, and the responsibility for the precise implementation of the budget would lie with the programs themselves. However, the challenge here is the unexpected developments, for example, projects that should be developed to keep licensing mandatory. The benefit here would be that the case company would not prepare that budget every year. Nevertheless, surprising change projects should be budgeted.

Finally, a company can make its process more agile by increasing transparency in decision-making and involving staff in the selection of projects to be developed, which Sommer (2019) suggests. The company is aware of this, and as a first step, the company has introduced a sparring workshop where the aim is to spar all the upstream ideas together with the involvement of the staff. The aim is to ensure that, through its sparring, the company gets more ready-made projects for decision-making and thereby possibly better results from the projects to be developed.

LocalTapiola has a clear need and desire to modernize its PPM processes, and this has now been pursued with a new PPM process model with the former being too expensive and rigid where too many things were done at the same time. Also, communication in the former model was silhouetted. The new PPM process looks good in terms of agility if the company gets the responsibilities and roles related to the process to work. To be more agile, the company should consider flexible, multi-year budgeting, which has already been discussed in the company. Besides, a straightforward decision-making process that is transparent to everyone should be considered. This would save LocalTapiola from unnecessary project preparations when everyone knows the decision-making criteria and prioritization goals. Therefore, to be more agile in their PPM process, LocalTapiola should consider the following points, which are illustrated in the following Table 5.

Table 5 Points to consider when forming a more agile PPM process in LocalTapiola

Continuous evaluation
• Through continuous project evaluation and response • Through re-evaluation, improvement, monitoring, and reporting of its practices
Stable teams
• By setting up stable teams that are dedicated to the development and dare to voice their opinions • Reward system
Flexible budgeting
• By defining flexible budgeting for projects
Involving employees
• By involving more staff and employees in decision making
Decisions based on strategy
• By making decisions based on strategy, implementing projects through a standardized process, and continuously coming up with new ideas

Next, this thesis proceeds to propose measures to LocalTapiola related to their PPM process.

6 CONCLUSION

This thesis is limited to looking at PPM from a single case study perspective, where the main research question was clarified through three operational objects. This chapter proposes measures to the case company and summarizes the whole study. Moreover, this chapter goes through its contributions and managerial implications. Besides, this chapter briefly examines the limitations of the study and suggests future research.

6.1 Contributions and managerial implications

This Master's thesis is a result of the case company LocalTapiola`s needs to find out the current status of their PPM process and to seek how to develop LocalTapiola's PPM process, with a focus on the agile early-stage process? With the answers given, the company might be able to meet competition that is even more robust. As business operations have become more project-focused (Hunt & Killen 2008; Duggal 2018, 3), yet up to 70% of various change projects fail (e.g. Todnem 2005, 370; Smits & Bowden 2015). This thesis aimed to examine what the company should consider when forming its early-stage PPM process. In addition to this, the operating environment of companies is continually changing in a more agile direction (e.g. Hunt & Killen 2008), and for this reason, this thesis explored how a company should form its PPM process in order to operate as agilely as possible. The first purpose of this thesis was to determine the status of PPM in the case company. At the same time, the purpose of this thesis was to find out how the company's PPM process could be made even more agile. Besides, this thesis explored the challenges faced around the PPM process in the case company.

Initially, the researcher formed an overall picture of the PPM process in the literature utilizing many different studies in the field (e.g. Killen & Hunt 2010; Bentzen & Christiansen 2011; Dolci et al. 2014; Haya, Kumarin & Subramamiam 2016; Ramakrushna 2017; Strategic Directions 2017; Stettina et al. 2018). The generated PPM process (Figure 4) included the identification, selection, and implementation phases. These upper-level steps in the process had been broken down to an even more precise level, from gathering ideas, prioritizing the project to be developed through prioritization and selection, and closing the project. The case company of this thesis was in the middle of an OC in PPM processes, and the company felt that the beginning and the end of the PPM process were challenging. At the beginning of the PPM process, this thesis found that through careful project review and preparation, a company might achieve better project outcomes. At the

end of the established PPM process, research would complement the realization of benefits as one of the top points of the PPM process, as the business payback and through the added value of a newly developed project, will begin to generate upon completion of the project. In addition to these, this thesis found that to facilitate the realization of benefits, the company could set up a BCM team to take care of the delivery of business benefits to businesses. Besides, to make the PPM process more agile, this research found that continuous project evaluation and response starting from the selection phase could help a company to be more agile. Since the findings of this thesis suggest the formation of a PPM process, as mentioned above, this thesis proposes to add those findings to the case company`s current PPM process.

This thesis proposes an addition to the formed PPM process by adding one pre-screening phase at the beginning of the process and emphasizing the utilization of benefits at the end of the process by emphasizing it as its top phase. At the same time, the thesis highlights the use of the BCM -team to help to utilize the benefits for businesses implementing the business benefits of projects into businesses. Since this research proposes the additions mentioned above to the company’s PPM process, the proposed picture of the PPM process based on the research results of the study and the literature is illustrated in Figure 13.

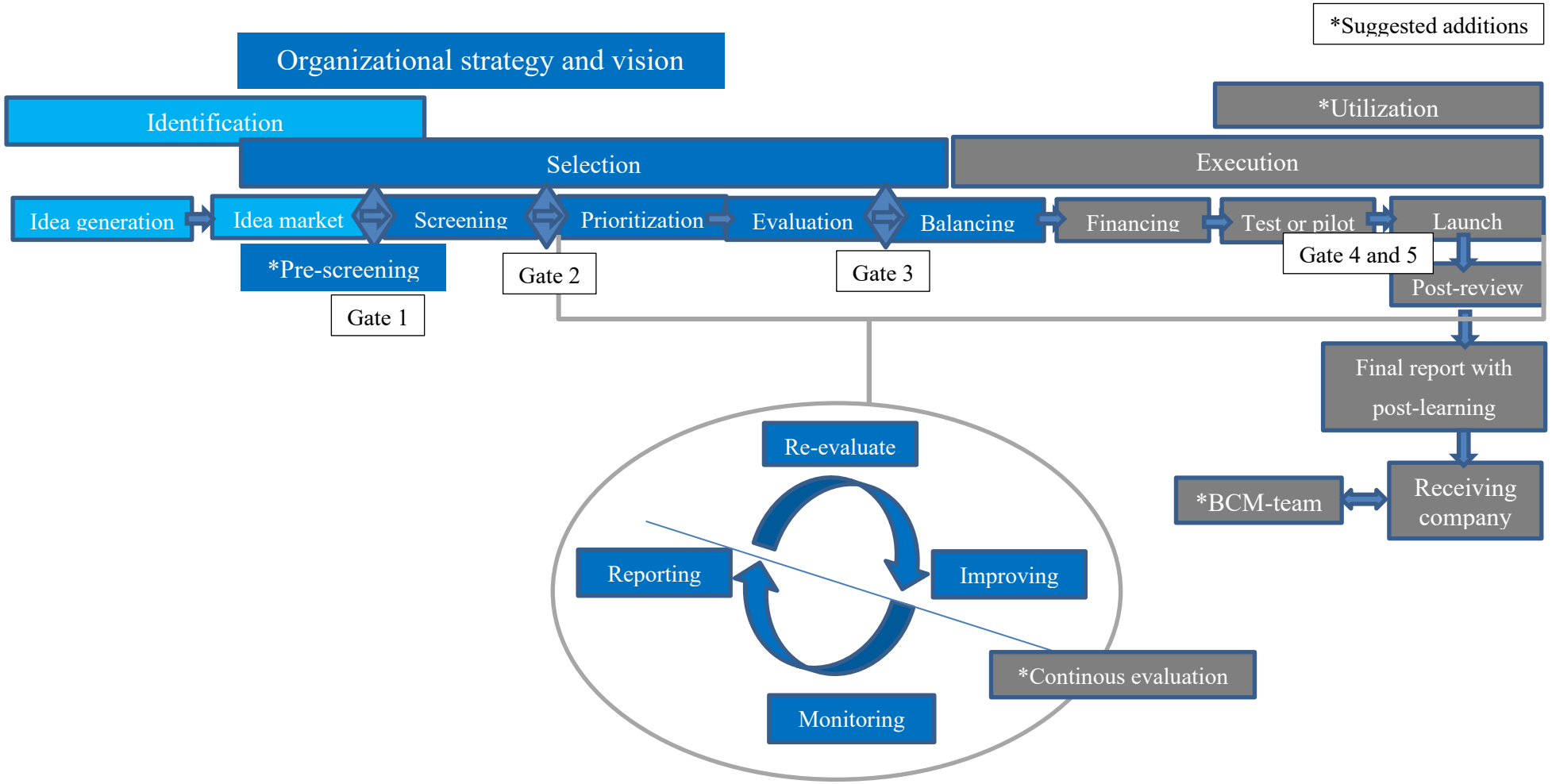

Figure 13 The PPM process formed in the thesis (Modified from Killen & Hunt 2010; Bentzen & Christiansen 2011; Dolci et al. 2014; Haya, Kumarin & Subramamiam 2016; Ramakrushna 2017; Strategic Directions 2017; Stettina et al. 2018)

To the researcher's knowledge, the early-stage PPM process has been little studied (e.g. Heising 2012), although the PPM process itself has been studied. Therefore, this thesis examined the beginning of the PPM process in LocalTapiola and found six crucial factors to be considered when forming the early-stage PPM process in the company: Project screening, Preparation, Strategical decisions, Dependencies, and Transparency.

In summary, LocalTapiola`s PP has more than 100 change projects each year. Projects can be IT and ICT projects that improve efficiency or customer relationship management. Besides, a large portion of the company's PP consists increasingly of legal and compliance requirements. Managing this entity has proven to be challenging for the company, and now LocalTapiola is aiming to be able to look at project proposals in depth at an early-stage. At the same time, the challenge for the company has been to prepare projects that are done too hastily, which means that not all dependencies between projects and programs can be appropriately bracketed, and project definitions are not collected properly. Project selection should also be based even more firmly on the company's strategy, which has now been sought to be concretized. Project development decisions should be transparent to project owners to understand which projects are considered for development. These six factors LocalTapiola should be addressed when forming the early-stage PPM process.

Lastly, this thesis explored ways in which a company could make its PPM process even more agile and identified five critical points to consider for LocalTapiola as it improves its PPM process: Continuous evaluation, Stable Teams, Flexible Budgeting, Involving employees and Decisions based on Strategy. In order for a company to be agile, it must continuously evaluate its projects and, to this end, the research suggests early-stage monitoring and reporting tool which is already used by the company or other tool from the market. This would make the entire project life cycle easily visible. At the same time, each project would provide the same information to the person working around the PPM process simultaneously and consistently, and would facilitate ongoing monitoring and evaluation of projects.

The case company has also considered forming stable teams. The teams would strive to improve the preparation and implementation of the company's projects as the processes come to the projects without resourcing being a problem in the preparation phase. With flexible budgeting, the company would be able to divide its development costs over many years into different project entities. The project owners would be responsible for project

adequacy and budgeting. In addition, the company should have a financial buffer for unexpected development costs. The company has sought to involve its staff in decision-making by opening a pre-screening of project proposals to an event open to all employees, called a sparring workshop. This is already a good start for employee involvement in project development decisions. Finally, in order for the company to be as agile as possible, it should follow its strategic guidelines, which should be made as concrete as possible, so that everyone involved in project development understands what is expected of the project to be developed and the process involved.

Although the interviews with LocalTapiola revealed many challenges related to the different stages of the PPM process, the business development mindset is moving in a more agile direction with their most recent OC. With the new PPM process, the company's initial PPM process will concretize, and the decision-making criteria will become more concrete. Furthermore, the case company will certainly prioritize its PP in the near future to be able to better focus on the right projects for the company, to prepare projects with high quality, and to manage the dependencies between projects and operations better.

To conclude, this thesis sought to provide a single real-life case study based on the early-stage PPM process to increase the research field of the topic. At the same time, this thesis found indications that the time spent on preparing and screening early-stage projects for a company can have a positive effect on project outcomes. For this reason, this thesis suggests adding a pre-screening phase to the PPM process. Besides, the thesis found that the BCM team could be added to the PPM process to take care of the challenging utilization of benefits for the business. Furthermore, the thesis provided many alternatives to the early-stage challenges identified by the company while suggesting ways to make the PPM process more agile.

6.2 Limitations and future research suggestions

This thesis was conducted by a single company operating in the financial and insurance sectors. For this reason, research on the subject should be extended to other industries in the future. Besides, the owner-customer organization model specific to the case company is also rare, so the company's PPM processes are formed according to this form of the company. Furthermore, every Organizational Change (OC) and project is different, so there are research results that cannot be generalized to other companies. However, this thesis provides a comprehensive picture of LocalTapiola's PPM process. Besides, the the-

sis illustrates how agile LocalTapiola`s processes are. At the same time, the research suggests ways for LocalTapiola to form its early-stage process. For this study to be treated as an action research, the company should also put the findings of the research into practice. However, this is left to the discretion of the company itself, so the researcher treats the thesis as a single case study.

In this thesis, it proved challenging to delineate the research in a way that serves the academic research field and the case company. At the same time, the case company is undergoing an OC, consequently changing the decision-making process and responsibilities for managing its PP`s, creating a challenge to form an overall picture of the current PPM process in the company.

Moreover, the company under study was also examined solely from the perspective of decision-makers working around the PPM process. However, this thesis sought support for the research from an interview with an external consultant. Although the interviews were conducted with high transparency, the research was initially started to be carried out of the researcher's own desire to study the company's operations. This can also affect the answers given by the company. However, the research topic and the problem to be solved came from the company. In addition to this, the thesis researcher worked in the case company, so he was familiar with the company's processes and was thus able to steer the discussion into certain areas unnoticed. Regardless, the thesis has tried to openly describe the research problem and its state, leaving nothing relevant out of the research.

The PPM process has been extensively studied (e.g. Killen & Hunt 2010; Bentzen & Christiansen 2011; Dolci et al. 2014; Haya, Ku-marin & Subramamiam 2016; Ramakrushna 2016; Strategic Directions 2017). Moreover, the additions proposed by the thesis to the PPM process presented in previous studies are not widely accepted. This thesis also excluded the implementation of utilization phases outside the research, so this could also be explored in more detail in the future. With each company being unique and operating in a different environment with different processes, it is impossible to provide all-encompassing research, and no original research can provide it.

Finally, although the thesis identified many factors to be considered in both the early-stage and the agile PPM process from both previous studies and interviews, it might be useful to examine the management of PP dependencies in future studies. Research on the transparency of PP decision-making and related communication could be investigated in the future also.

REFERENCES

Abbott, H. – Booth, H. (2014) Foundations for Operating Department Practice: Essential Theory for Practice. Open University Press.

Ahmad, A. – Lwakatare, L. – Kuvaja, P. – Oivo, M. – Markkula, J. (2016) An empirical study of portfolio management and Kanban in agile and lean software companies. *Journal of Software: Evolution and Process*. Vol. 29 (6), 1–16.

Appelbaum, S. – Profka, E. – Depta, A. – Petrynski, B. (2018) Impact of business model change on organizational success. *Industrial and Commercial Training*. Vol. 50 (2), 41–54.

Archer, N. – Ghasemzadeh, F. (1999) An integrated framework for project portfolio selection. *International Journal of Project Management.* Vol. 17 (4), 207–216.

Arefazar. Y. – Nazari, A. – Hafezi, M. – Maghool S. (2019) Prioritizing agile project management strategies as a change management tool in construction projects. *International Journal of Construction Management.* 1–12.

Artto, K. – Martinsuo, M. – Kujala, J. (2006) Projektiliiketoiminta. WSOY, Helsinki.

Benko, C. – McFarlan, W. (2004) Managing a growth culture: how CEOs can initiate and monitor a successful growth-project culture. *Strategy & Leadership*. Vol 32 (1), 34–42.

Bentzen, E. – Christiansen, J. – Varnes, C. (2011) What attracts decision makers' attention? Managerial allocation of time at product development portfolio meetings. *Management Decision*. Vol. 49 (3), 330–349.

Beringer, C. – Jonas, D. – Kock, A. (2013) Behavior of internal stakeholders in project portfolio management and its impact on success. *International Journal of Project Management.* Vol. 31 (6), 830–846.

Blichfeldt, B. – Eskerod, P. (2008) Project portfolio management – There's more to it than what management enacts. *International Journal of Project Management.* Vol. 26 (4), 357–365.

Bonazzi, F. – Zilber, M. (2014) Innovation and Business Model: a case study about integration of Innovation Funnel and Business Model Canvas. *Revista Brasileira de Gestao de Negocios*. Vol. 16 (53), 616–637.

Bosbach, K. – Brillinger, A. – Schäfer, B. (2020), "More can be better: operating multiple business models in a corporate portfolio", *Journal of Business Strategy*. Vol. 41 (4), 47–54.

Brannick T. – Coghlan D. (2007) In Defense of Being "Native" The Case for Insider Academic Research. *Organizational Research Methods*. Vol. 10 (1), 59–74.

Buchanan, D. (2003) Demands, instabilities, manipulations, careers: The lived experience of driving change. *Human Relations*. Volume 56(6), 663–684.

Burnes, B. (1996) No such thing as … 'one best way' to manage organizational change. *Management Decision*. Vol. 34 (10), 11–18.

Burnes, B. (2004) Managing change: A Strategic Approach to Organisational Dynamics. 4th edn. Prentice Hall.

Cassell, C. – Gillian, S. (1994) Qualitative Methods in Organizational Research: A Practical Guide. SAGE Publisher, London.

Chen, T. – Shao, Y. – Tang, X. (2009), "Problem solving process research of everyone involved in innovation based on CAI technology". In Huesig, S. – Endres, H. (2019) Exploring the digital innovation process. *European Journal of Innovation Management*. Vol. 22 (2), 302–314.

Cooper, R. (2000) Perspective: The Stage-Gate Idea-to-Launch Process – Update, What's New and NexGen Systems. Working paper, report no. 30, Product Development Institute Inc.

Cooper, R. – Edgett, S. – Kleinschmidt, E. (2000) New problems, new solutions: making portfolio management more effective. *Research Technology Management*. Vol.43 (2), 18–33.

Cooper, R. – Edgett, S. – Kleinschmidt, E. (2001a) Portfolio management for new products– picking the winners. Working paper, report no. 11, Product Development Institute, Ancaster, Ontario.

Cooper, R. – Edgett, S. – Kleinschmidt, E. (2001b) Portfolio Management for New Products. 3rd edn. Perseus, Cambridge, MA.

Cooper, R. – Edgett, S. – Kleinschmidt, E. (2002) Optimizing the stage-gate process: What best-practice companies do-1. *Research Technology Management.* Vol. 45 (5), 21–27.

Cooper, R. – Edgett, S. – Kleinschmidt, E. (2002) Portfolio management for new product development: Results of an industry practices study. *Research & Development Management.* Vol 31 (4), 361–380.

Cooper, R (2009) How companies are reinventing their idea-to-launch methodologies. *Research Technology Management*. Vol 52 (2), 47–57.

Cooper, R. – Edgett, S. (2010) Developing a product innovation and technology strategy for your business. *Research-Technology Management*, Vol. 53 (3), 33–40.

Cooper, R (2017) Idea-to-launch gating systems. *Research Technology Management.* Vol. 60 (1), 48–52.

Cooper, R. – Sommer, A. (2020) New-Product Portfolio Management with Agile: Challenges and Solutions for Manufacturers Using Agile Development Methods. *Research Technology Management.* Vol. 63 (1), 29–38.

D`Amico, V. (2005) Manage your IT Project like an investment portfolio. Handbook of business strategy. 251–255.

Dolci, P. – Mac¸ada, A. – Grant, G. (2014) IT investment management and information technology portfolio management (ITPM): Brazilian case studies. *Journal of Enterprise Information Management.* Vol. 27 (6), 802–816.

Dove, R. (1999) Knowledge management, response ability, and the agile enterprise. *Journal of Knowledge Management*. Volume 3 (1), 18–35.

Duggal, J. (2018) The DNA of Strategy Execution: Next Generation Project Management and PMO. John Wiley & Sons, Inc., Hoboken, New Jersey.

Dunphy, D. – Stace, D. (1993) The strategic management of corporate change. *Human Relations*. Vol. 46 (8), 905–918.

Pennypacker J. – Dye, L. (2002) Managing Multiple Projects: Planning, Scheduling, and Allocating Resources. Marcel Dekker Inc. New York.

Eriksson, P. – Koistinen, K. (2005) Monenlainen tapaustutkimus. Kuluttajatutkimuskeskus, julkaisuja 4:2005, Helsinki.

Eriksson P. – Kovalainen A. (2011) Qualitative Methods in Business Research. London, 138–153.

Gibbs, G. (2007) The Nature of Qualitative Analysis. In: Analyzing Qualitative Data. SAGE Publications, London.

Haass, O. – Guzman, G. (2019) Understanding project evaluation – a review and reconceptualization. *International Journal of Managing Projects in Business*. Forthcoming.

Haya, A. – Kumar, R. – Subramaniam, C. (2016) Information technology portfolio management implementation: a case study. *Journal of Enterprise Information Management*. Vol. 29 (6), 841–859.

Heising, W. (2012) The integration of ideation and project portfolio management—A key factor for sustainable success. *International Journal of Project Management*. Vol 30 (5), 582–595.

Hirsjärvi, S. – Remes, P. – Sajavaara, P. (2000) Tutki ja Kirjoita. Tammi, Helsinki.

Huesig, S. – Endres, H. (2019) Exploring the digital innovation process. *European Journal of Innovation Management*. Vol. 22 (2), 302–314.

Hunt, R. – Killen, C. (2008) Best practice project portfolio management. *International Journal of Quality & Reliability Management*, Vol. 25 (1), https://doi-org.ezproxy.utu.fi/10.1108/ijqrm.2008.04025aaa.001.

Hunt, R. – Killen, C. (2013) Robust project portfolio management: capability evolution and maturity. International Journal of Managing Projects in Business Vol. 6 No. (1), 131–151.

Huy, Q. (2002) Emotional Balancing of Organizational Continuity and Radical Change: The Contribution Qf Middle Managers. Cornell University.

Hynuk, S. – Benoit, R. – Bourgault, M. – Pellerin, R. (2009) Risk management applied to projects, programs, and portfolios. *International Journal of Managing Projects in Business.* Vol. 2 (1), 14–35.

Idler, B. – Spang, K. (2019) IT project decisions: conclusions and recommendations for corporate practice. *International Journal of Managing Projects in Business*. Vol. 12 (4), 1030–1060.

Jerbrant, A. – Gustavsson, T. (2013) Managing project portfolios: balancing flexibility and structure by improvising. International Journal of Managing Projects in Business. Vol. 6 (1), 152–172.

Jiao, Y. – Saeed, M. – Fu, S. – Wang, X. (2019) How knowledge sharing contributes to project portfolio success: Empirical analysis of construction firms in China. *International Journal of Managing Projects in Business.* Forthcoming.

Karra N. – Phillips N. (2008) Researching "Back Home" International Management Research as Autoethnography. *Organizational Research Methods*. Vol. 11 (3), 541–561.

Killen, C. (2017) Managing portfolio interdependencies: The effects of visual data representations on project portfolio decision making. *International Journal of Managing Projects in Business*. Vol. 10 (4), 856–879.

Killen, C. – Hunt, R. (2010) Dynamic capability through project portfolio management in service and manufacturing industries. *International Journal of Managing Projects in Business.* Vol. 3 (1), 157–169.

Killen, C. – Hunt, R. – Kleinschmidt, E. (2008) Project portfolio management for product innovation. *International Journal of Quality & Reliability Management.* Vol. 25 (1), 24–38.

Klingebiel, R. – Rammer, C. (2013) Resource allocation strategy for innovation portfolio management. *Strategic Management Journal*. Volume 35 (2), 246–268.

Kloppenborg, T. – Laning, L. (2012) Strategic Leadership of Portfolio and Project Management: Bridging the Gaps Between Setting and Executing Strategy. Business Expert Press, New York.

Koskinen, I. – Alasuutari, P. – Peltonen, T. (2005) Laadulliset menetelmät kauppatieteissä. Vastapaino, Tampere.

Kotter, J. (1996) Leading Change. Harvard Business School Press.

Krebs, J. (2019) Agile Portfolio Management. Microsoft Press, Washington.

Laanti, M. – Kangas, M. (2015) Is Agile Portfolio Management Following the Principles of Large-Scale Agile? Case Study in Finnish Broadcasting Company Yle. AGILE 2015, IEEE, 92–96.

Livne-Tarandach, R. – Bartunek, J. (2009) A new horizon for organizational change and development scholarship: Connecting planned and emergent change. *Research in Organizational Change and Development*. Vol. 17, 1–35.

LocalTapiola (2019a) Toimintakertomus ja tilinpäätös 2019. http://public.egate.fi/lahitapiola/lahitapiola/fi/tiedostot/229068/. Retrieved 24.5.2020

LocalTapiola (2019b) LähiTapiola-ryhmän tulos 2019: Uudistumisemme elämänturvayhtiönä etenee suunnitellusti. Lehdistötiedote 13.2.2020. http://public.egate.fi/lahitapiola/lahitapiola/fi/tiedostot/228498/. Retrieved 24.5.2020

LocalTapiola (2020a) Tietoa yhtiöryhmästä. https://www.lahitapiola.fi/tietoa-lahitapiolasta/lahitapiola-ryhma/yhtioryhmatietoa/yhtioryhman-hallintomalli. Retrieved 24.5.2020.

LocalTapiola (2020b) Kehittämisen malli. Retrieved 7.7.2020

LocalTapiola (2020c) Työjärjestys. Retrieved 7.7.2020

Lock, D. – Wagner, R. (2019) The Handbook of Project Portfolio Management. Abingdon, Oxon: Routledge.

Luiz, O. – Souza, F. – Luiz, J. – Jugend, D. – Salgado, M. – Silva, S. (2019) Impact of critical chain project management and product portfolio management on new product development performance. *Journal of Business & Industrial Marketing*. Vol 34 (8), 1692–1705.

Maceta, P. – Berssaneti, F. (2019) Comparison of project portfolio management practices in the public and private sectors in Brazil: Characteristics, similarities, and differences. *International Journal of Managing Projects in Business*. Forthcoming.

March, J. (1981) Footnotes to organizational change. Cornell University.

Medina, R. – Medina, A. (2015) The competence loop. *International Journal of Managing Projects in Business.* Vol. 8 (2), 279–299.

Meskendahl, S. (2010) The influence of business strategy on project portfolio management and its success - A conceptual framework. *International Journal of Project Management*. Vol. 28 (8), 807–817.

Moran, J. – Brightman, B. (2001) Leading organizational change. Career Development International. Vol. 6 (2/3), 111–119.

Morcos, M. (2008) Modelling resource allocation of R&D project portfolios using a multi-criteria decision-making methodology. *International Journal of Quality & Reliability Management.* Vol. 25 (1), 72–86.

Müller, R. – Jugdev, K. (2012) Critical success factors in projects. *International Journal of Managing Projects in Business.* Vol. 5 (4), 757–775.

Olsson, R. (2008) Risk management in a multi-project environment: An approach to manage portfolio risks. *International Journal of Quality & Reliability Management*. Vol. 25 (1), 60–71.

Paalumäki, A. – Vähämäki, M. (2020) Havainnointi organisaatiotutkimuksessa. Turun kauppakorkeakoulun julkaisuja, 131–140.

Patanakul, P. – Milosevic, D. (2009) The effectiveness in managing a group of multiple projects: Factors of influence and measurement criteria. *International Journal of Project Management.* Vol. 27 (3), 216–233.

Pettigrew, A. – Woodman, R. – Cameron, K. (2001) Studying organizational change and development: Challenges for future research. *Academy of Management Journal.* Vol. 44 (4), 697–713.

Piekkari, R. – Welch, C. (2011) Rethinking the Case Study in International Business and Management research. Edward Elgar Publishing. United Kingdom.

Puusa, A. – Juuti, P. (2011) Menetelmäviidakon raivaajat - Perusteita laadullisen tutkimuslähestymistavan valintaan. Johtamistaidonopisto, Turku.

Ramakrushna, P. (2017) Six Sigma project selections: a critical review. *International Journal of Lean Six Sigma*. Vol. 8 (2), 244–258.

Rosenbaum, D. – More, E. – Steane, P. (2018) Planned organisational change management: Forward to the past? An exploratory literature review. *Journal of Organizational Change Management*. Volume 31 (2), 286–303.

Rungi, M. (2010) Success rate and resource consumption from project interdependencies. *Industrial Management & Data Systems*. Vol. 110 (1), 93–110.

Sa´nchez, M. – Mac¸ada, A. – Sagardoy, M. (2014) A strategy-based method of assessing information technology investments. *International Journal of Managing Projects in Business.* Vol. 7 (1), 43–60.

Schneckenberg, D. (2015) Open innovation and knowledge networking in a multinational corporation. *Journal of business strategy*. Vol. 36 (1), 14–24.

Senior, B. – Fleming, J. (2006) Organisational Change, 3rd edn. Prentice Hall.

Siggelkow, N. (2001) Change in the presence of fit: the rise, the fall, and the renaissance of Liz Claiborne. *Academy of Management Journal*. Vol. 44 (4), 838–857.

Silva, L. – Oliveira, S. (2016) A Process Framework with Agile Practices for Implementation of Project Portfolio Management Process. 2016 10th International Conference on the Quality of Information and Communications Technology, 146–149.

Smits, S. – Bowden, D. (2015) A perspective on leading and managing organizational change 1. *Economics and Business Review*. Issue 2, 3–21.

Sommer A. (2019) Agile Transformation ar LEGO Group. *Research-Technology Management.* Vol 62 (5), 20–29.

Stentoft, J. – Freytag, P. – Thoms, L. (2015) Portfolio management of development projects in Danish municipalities. *International Journal of Public Sector Management*. Vol. 28 (1), 11–28.

Stettina, C.– Hörz, J. (2014) Agile portfolio management: An empirical perspective on the practice in use. *International Journal of Project Management*. Vol. 33 (1), 140–152.

Stettina, C. – Offerman, T. – de Mooij, B. – Sidhu, I. (2018) Gaming for Agility: Using Serious Games to Enable Agile Project & Portfolio Management Capabilities in Practice. 2018 IEEE International Conference on Engineering, Technology and Innovation, 1–9.

Strategic Direction (2007) Seven “principles” of innovation: A lack of focus. *Strategic Direction*. Vol. 23 (1), 38–40.

Strategic Direction (2017) Bettering the business process: BPM and business process improvement as the catalyst for revolution. *Strategic Direction*. Vol. 33 (8), 33–35.

Struckman, C. – Yammarino, F. (2003) Organizational change: A categorization scheme and response model with readiness factors. *Research in Organizational Change and Development*. Vol 14, 1–50.

Sungjoo, L. – Kang, S. – Euisuk, P. – Yongtae, P. (2008) Applying technology road-maps in project selection and planning. *International Journal of Quality & Reliability Management.* Vol. 25 (1), 39–51.

Todnem, R. (2005) Organisational change management: A critical review. *Journal of Change Management*. Vol. 5 (4), 369–380.

Toivonen, E. (2016) Intohimona projekti-, sovellus ja palvelusalkunhallinta. Thinking portfolio. https://dl.wakaru.fi/dl.php?code=rH64woZb. Retrieved 26.6.2020.

Vickers M. (2002) Researchers as Storytellers: Writing on the Edge And Without a Safety Net. *Qualitative Inquiry*. Vol. 8 (5), 608–621.

Visconti, L. (2010) Ethnographic Case Study (ECS): Abductive modeling of ethnography and improving the relevance in business marketing research. Industrial Marketing Management. Vol. 39 (1), 25–39.

Vora, M. (2013) Business excellence through sustainable change management. *TQM Journal*. Vol. 25 (6), 625–640.

Vähäniitty, J. (2012) Towards Agile Product and Portfolio Management. Doctoral dissertation.

Weick, K. – Quinn, R. (1999) Organizational change and development. *Annual Review Psychology*. Vol. 50, 361–386.

Westerski, A. – Iglesias, C. – Nagle, T. (2011) The road from community ideas to organizational innovation: a life cycle survey of idea management systems. *International Journal of Web Based Communities*. Vol. 7 (4), 493–506. In Huesig, S. – Endres, H. (2019) Exploring the digital innovation process. *European Journal of Innovation Management*. Vol. 22 (2), 302–314.

APPENDICES

Appendix 1. Interview Framework

Question nro.	Question
1.	Mikä on työnkuvasi?
2.	Monessako projektissa olet ollut mukana?
3.	Millainen on koko projektisalkun läpiviemisprosessi LähiTapiolassa? Tarkennukset vaiheittain.
4.	Miten projektisalkun alkupäätä (ideavaihetta) johdetaan?
5.	Millaisia projektityyppejä LähiTapiolalla on projektisalkussa? Kuinka paljon niitä on?
6.	Kuka tekee päätöksen projektisalkkuun valituista projekteista? Mikä on oma roolisi tässä projektisalkun päätöksentekoprosessissa?
7.	Mitä haasteita olet kohdannut eri projektisalkunhallinnan prosessissa? ideavaihe, päätöksentekovaihe, hallintavaihe
8.	Mitä hyviä käytänteitä LähiTapiolan projektisalkunhallinnan prosessissa on? ideavaihe, päätöksentekovaihe, hallintavaihe
9.	Mihin projektisalkun johtamisella pyritään? Mikä on sen päämäärä?
10.	Miten projektisalkun johtamisen onnistumista mitataan?
11.	Millainen on projektien priorisoinnin prosessi LähiTapiolassa?
12.	Millainen on projektien tavoitteiden asettamisen prosessi?
13.	Millä kriteereillä projektit valitaan kehitettäväksi projektisalkkuun?
14.	Kuinka projekteille luovutetaan resursseja ja kuinka niitä johdetaan?
15.	Mitä haasteita projektien priorisoinnissa on esiintynyt?
16.	Mitä hyviä käytänteitä olet kohdannut projektien priorisointiin liittyen?
17.	Kuinka projektien etenemistä seurataan/mitataan?
18.	Kuinka pitkä on projektien arviointi-, priorisointi- ja valintaprosessi ideavaiheesta valintaan?
19.	Kuinka saatte tiedon ideavaiheessa olevista projekteista?
20.	Kuinka pystytte valmistautumaan ideavaiheessa olevien projektien rahoituksen hakemiseen?

21.	Miten olette toimineet tähän mennessä isojen projektien tullessa tarkasteluun, jos budjetti ei ole ollut riittävä?
22.	Miten päätöksentekoprosessista voisi tehdä vieläkin ketterämmän?
23.	Kuinka projektiportfoliota voisi ennustaa entistä paremmin?
24.	Miten projektit voisivat ilmoittaa itsestään ollessa vasta ideavaiheessa? Olisiko tästä hyötyä?
25.	Mitä LähiTapiolan pitäisi näiden projektisalkkuun liittyvien prosessien suhteen vielä kehittää?
26.	Mitä hyviä käytänteitä haluaisit vielä nostaa esiin projektisalkun idea-, valinta- ja hallintavaiheen prosesseista?
27.	Onko jotain mitä vielä haluaisit tuoda esiin aiheeseen liittyen?