

Master's thesis

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Lotta Lithonius

# CREATION OF PROJECT MANAGEMENT FRAMEWORK

– towards more structured, effective and common  
way of working on projects in the case  
organization

MASTER'S THESIS | ABSTRACT

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# CREATION OF PROJECT MANAGEMENT FRAMEWORK

- towards more structured, effective and common way of working on projects in the case organization

Project management is in the center of the business in many organizations. To increase the effectiveness of project management and likelihood of projects succeeding there are many different methodologies and frameworks available. For the organizations it's essential to choose methodologies and frameworks best suited to their needs and continuously develop them based on organization-specific requirements.

This thesis was carried out for the case organization where it had been identified the need to ensure successful and high-quality project business now and in the future. To support that it was seen beneficial to create the organization-specific project management framework. The objective of this thesis was to find out the organization specific best practices and required actions related to successful project management. The research was carried out using qualitative research methods, eg. workshops and iterative discussions in tight collaboration with the people working in the organization. The collected research data was analysed by grouping and categorizing based on the themes.

Based on the research findings several organization-specific key areas as well as best practices and required activities were identified. The findings of this thesis were utilized in creation of the concrete project management framework and it was delivered for the organization in attachment to this thesis. In addition to the results of this research also additional development areas were identified and provided for the case organization.

## KEYWORDS:

project, project management, project leadership, project work, business development

Lotta Lithonius

## PROJEKTINHALLINTAMALLIN LUOMINEN

- kohti strukturoidumpaa, tehokkaampaa ja yhtenäisempää projektityöskentelyä case-organisaatiossa

Projektijohtaminen on keskeinen osa liiketoimintaa monissa organisaatioissa. Saatavilla on useita erilaisia projektijohtamisen malleja ja metodologioita, minkä avulla on mahdollista lisätä projektijohtamisen tehokkuutta sekä projektien onnistumisen todennäköisyyttä. Organisaatioiden on tärkeää valita toimintaansa parhaiten palvelevat mallit ja metodologiat sekä jatkuvasti kehittää niitä vastaamaan organisaation ja liiketoiminnan tarpeita.

Tämä opinnäytetyö toteutettiin toimeksiantona case-organisaatiolle, jonka toiveena on varmistaa menestyksellisen ja laadukas projektiliiketoiminta nyt ja tulevaisuudessa. Tätä tavoitetta tukemaan päätettiin luoda yhteinen projektijohtamisen malli organisaation käyttöön. Tämän opinnäytetyön avulla pyrittiin selvittämään, mitkä ovat organisaatiokohtaisia parhaita käytäntöjä sekä toimintatapoja liittyen onnistuneeseen projektien läpiviemiseen. Tutkimuksessa hyödynnettiin laadullisia tutkimusmenetelmiä, kuten työpajoja sekä toistuvia keskusteluita tiivissä yhteistyössä case-organisaation henkilöstön kanssa. Saadut tutkimustulokset analysoitiin tunnistettujen teemojen perusteella käyttämällä ryhmittelyä sekä kategorisointia.

Saatujen tutkimustulosten perusteella tunnistettiin useita organisaatiokohtaisia kehityskohteita sekä parhaita käytäntöjä ja vaadittavia toimintatapoja. Näitä tutkimustuloksia hyödynnettiin myös tämän opinnäytetyön liitteenä case-organisaatiolle tuotetun projektityöskentelymallin luomisessa. Tutkimuksen aikana saatiin selville muitakin kehityskohteita, jotka toimitettiin case-organisaation hyödynnettäväksi.

### ASIASANAT:

projekti, projektihallinta, projektijohtaminen, projektityöskentely, liiketoiminnan kehittäminen

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# 1 INTRODUCTION

## 1.1 Background of the thesis

In corporate environment most of the work is centered around projects at some level at least, however that is not a new trend in business. Most of the personnel in companies are working or participating in projects in as a part of their daily work. As working life is rapidly changing and the ways of working is evolving it creates challenges in ensuring the competence and capabilities in the organization and keeping up with the phase – also when it comes to the project management.

In the U.S. 50 percent of all software projects are struggling and usually because of the reason that they are late, overspent or the performance requirements needs to be reduced. As many as 33 percent of all software projects are actually cancelled. The same applies for new product development projects where it is estimated that 30 % of work is rework which means redoing the work that has been done wrong in the first place. In most cases the cause of the failures in projects is found in inadequate project planning. (Heagney 2012, 15.)

One of the recent studies discovered that the latest trends in project management are emphasised around topics such as large-scale projects, complex issues of project management and also factors behind the project success and failure. It was also discovered in the study that the need for standardised methodologies based on the frameworks with best practices are essential and they need to be tailored or combined to suit the purpose. The project managers' competence is stated to require ability to adopt new methods and tools to support the process of managing the more and more complicates projects as well as leading and coordinating the people involved in the project. (Ng 2019, 130–131.) Jouni Vaskimo (2015, 183) also reveals in his study that among the case organizations the most important project management methodology structure is in fact the project management structure.

New methodologies and ways of working will be formed as the nature of the work changes and it will also have affects on project management. To stay ahead it is important for the case organization to focus on developing their ways of working and ensuring the required competence exists to meet the current and future needs. It is clear that projects are always under the risk of failure and cancellation. With better planning

and structured project management framework it would be possible for the case organization to increase the successful performance and outcomes of the projects. At the moment there are no common ways of working on projects and people mainly rely on their own expertise. That causes unclarity and lowers effectiveness in organization's project management. In the case organization it was identified that one way of improving the project management is to create the common guidelines and structures for project management to support the people working in the projects. That's when the idea of creating the project management framework for the case organization was developed.

## 1.2 Objectives and the research problems of the thesis

The objective of this thesis is to increase and even out the quality of project management and increase knowledge and competence related to project management in the case organization. The research questions are:

1. What are the case organization-specific requirements and best practices needed or used in order to manage projects efficiently and systematically?
2. What key areas of project management the framework should cover?

In this thesis the focus will be on the project management methodologies as a structure and the project governance as necessary. The creation of common framework for project management covering the areas mentioned in the objective 1 was seen as a most important to start with when it comes to developing the applicable project management methodologies for the case organization. Project management as a term is very wide and variety of theories and research concerning the field exists. There are also other significant areas related to the project management methodologies. Due to the limited resources they are outside of the scope in this thesis.

## 1.3 The research methods used in the thesis

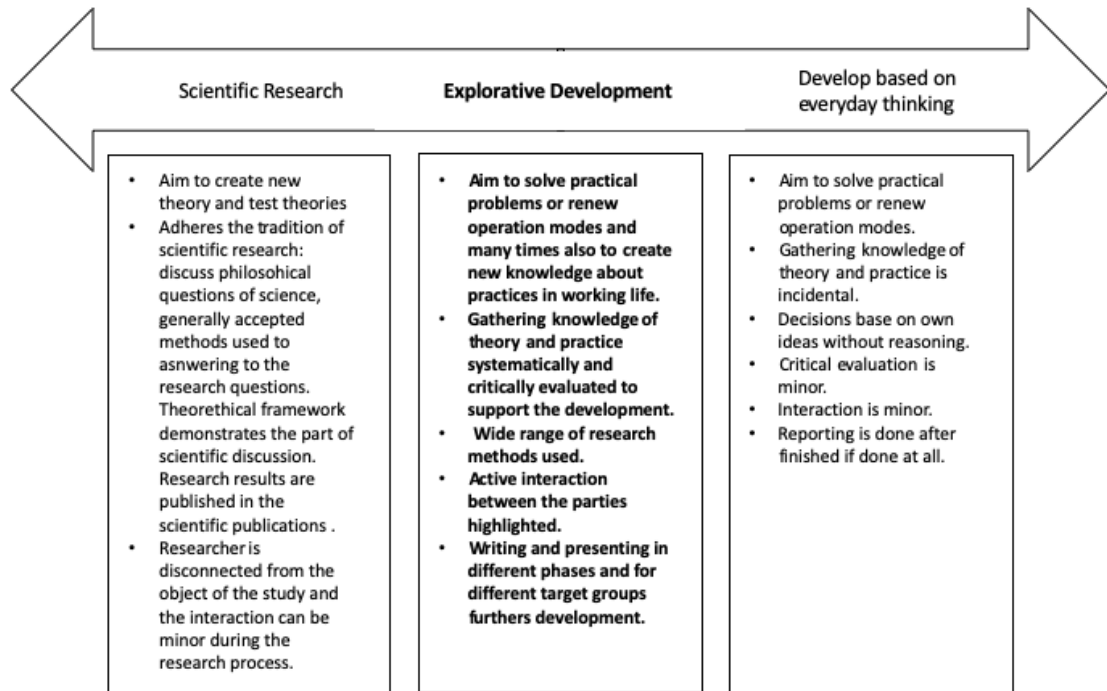
This thesis is carried out as a case study assigned by the case organization. The purpose of this study is to solve real work life challenge and develop a concrete tool for the case organization to develop their project management capabilities and support the working in projects instead of only providing assessment based on research data. The case study was seen as a relevant approach for the study as it's purpose is to produce in-depth and



detailed new information for the development of the organization's project business. In case study it's relevant to deep-dive into the case and to consider the organizational factors specific to the case instead of creating new generalizable research data. (Ojasalo et al. 2015, 52–53.)

In addition to the case study this research also takes advantage of the features of exploratory development as in addition to this thesis there will be a concrete documented project management framework created for the organization. The exploratory development is an alternative for scientific research. Research and development are usually put together as in wide range of companies for example use the established term of R&D (Research and Development). Exploratory development usually originates from the organization's needs to evolve or develop the operational mode. It consists of solving the concrete problems and executing or producing new ideas, operational modes, products or services. When talking about development it's purpose in the end is to further things ahead in concrete level. (Ojasalo et. al. 2015, 17.)

Exploratory development also challenges the traditions of scientific research where it is recognized that only generally accepted methods guarantee the validity of the results. What separates the exploratory development from using the everyday thinking as a base for development? Exploratory development proceeds systematically, analytically and critically and it combines the existing theory and practice. With exploratory development it is also possible to create new professional knowledge by documenting for example tacit knowledge that can be exploited also in the future development projects. In exploratory development it's common that processes or working methods are developed and evaluated in cycles ending in the evaluation of the results in practice. In this case the limited resources and time are preventing the long-lasting development process and evaluation after implementation and therefore the main approach is case study. However the further development of the project business and the content of the project management framework will be essential in the future for the case organization. The differences between the scientific research, exploratory development and development based on everyday thinking are described in the picture 1 below. (Ojasalo et al. 2015, 19–21.)



Picture 1. The nature of exploratory development. (Paraphrasing Ojasalo et al. 2015, 18.)

The approach is more practical when it comes to research to ensure that the framework is not too high-level or universal and case organization-specific requirements are taken into account. This way it's more likely to create true value for the organization and it's people in their daily work. Traditional scientific research that is commonly used in theses, differs from the exploratory development since the research methods used are not alike. In scientific research methods are usually divided into two different methods: qualitative or quantitative methods. In development it is not strictly required to use such traditional methods. Instead it is more important to consider what kind of information is needed and how it will be used. Usually collaborative methods are preferred since in many cases the researcher is at some level part of the group and development often requires tight collaboration between the participants. (Ojasalo et al. 2015, 40.)

Since the aim of this thesis is to create a project management framework for the case organization it requires tight collaboration between the participants. It is also important that the requirements and opinions are taken into account during the development process from the people working on projects in the case organization. That way the framework will meet organization's requirements the best possible way. Because of that the research methods chosen for this thesis are collaborative methods.

The input from participants working on projects will be gathered in several workshops. The aim of the workshops is to gather the tacit knowledge and best practices from their point of view when it comes to concrete actions and requirements in project management. Management's input will be more high level and it will be gathered in several iterative discussions. The aim is to find out what management sees as the most important areas to include in the framework and what activities or best practices they value. The data collected will then be analysed and combined with the theoretical framework to construct a case organization-specific project managements framework.

The information gathered from the workshops will be collected, stored and analysed in order to manage data efficiently to support good analysis. For analysis of the data qualitative methods will be used, eg. categorizing and grouping. Tool to be used is Microsoft Excel. Categorizing and grouping the data in multiple ways helps to form the content for project management framework; the data will be utilized to construct structural project life cycle and to understand which areas of project management structures are considered most challenging and therefore important to be included in the project management framework. (Dey 2005, 77–79, 101–102.)

## 2 PROJECT MANAGEMENT AS A STRUCTURE

### 2.1 Project management methodology and framework

Project management methodology is described as "a series of processes, activities and tools that are part of the specific discipline, as project management, and are designed to accomplish a specific objective". For the projects with similar requirements companies can develop methodologies that can be utilized with the same contents from project to project. Methodologies known for policies and procedures however can be replaced with more informal structure and it is referred as framework. (Kerzner 2017, 18.)

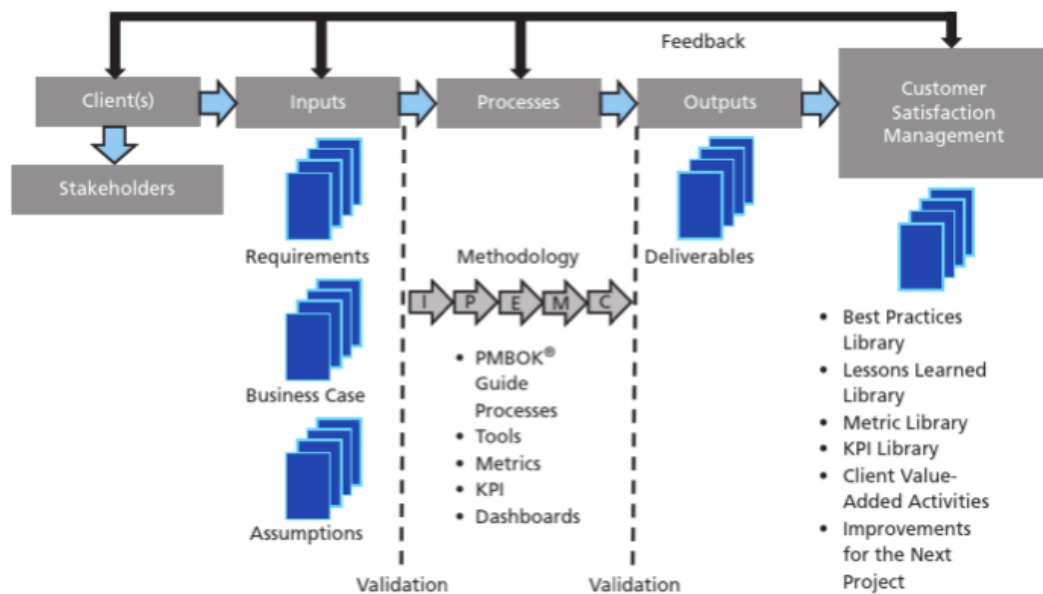
The definition of framework is described by Kerzner (2017, 18) as follows:

"A framework is a basic conceptual structure that is used to address an issue, such as project. It includes a set of assumptions, project-specific metrics, concepts, values and processes that provide project manager with a means for viewing what is needed to satisfy a customer's requirements. A framework is a skeletal support structure for building the project deliverables."

The methodology and framework differ from one another; framework consists less amount of documentation and is more agile and flexible whereas methodology works best in more traditional and complex projects. The difference between methodology and framework is clarified by Kerzner (2017, 17–18):

"**Framework:** The individual segments, principles, pieces or components, of the processes needed to complete a project. This can include forms, guidelines, checklists and templates. **Methodology:** The orderly structuring or grouping of the segments or framework elements. This can appear as policies, procedures, or guidelines."

Methodologies follow the basic structure of PMBOK® GUIDE's project life cycle phases that are Initiation, Planning, Execution, Monitoring and controlling and Closure. This structure is represented in more detailed level in chapter 3. In addition many organizations include the additional phase in the methodology called "Customer Satisfaction Management". The purpose of this phase is to review the project with customers and stakeholders in order to learn and document what could be done better in the future. Methodology and framework are used in similar way: both of them are "a tool or a method" how the objectives and requirements are fulfilled in form of a output of a project. How they are used as well as what they consists of in high level is illustrated in the picture 1. (Kerzner 2017, 19–20.)



Picture 2. How generic methodology or framework is used and what it consists of. (Kerzner 2017, 19.)

Vaskimo's (2015, 189) study points out the primary contents of project management methodologies among the case organization and based on the findings they are

1. documents and templates
2. process descriptions and guidelines
3. role definitions and descriptions
4. project minimum and compliance requirements

There are several aspects affecting on how the project management methodology should be designed. The aspects are company's strategy, size and complexity of project portfolio, management's faith in project management, development budget, amount of life cycle stages, technology requirements, customer needs, training requirements and costs as well as supporting tools and software costs. There are two main types; one is heavy methodology and the other is light methodology. Heavy methodology is described as traditional and characterized very bureaucratic and predicting with heavy workload because of severe amount of documentation required: planning, reporting, checkpoints and schedules. Light methodologies were created to challenge the traditional methodologies aiming to be more agile, adaptive and customer-oriented with more informal communication and closer cooperation with clients. (Kerzner 2017, 16–17.)

## 2.2 Benefits of project management methodologies

There is always a risk of failure when it comes to projects. Many associations, standards, methodologies and tools are available and developed to increase project success, eg. PMBOK and PRINCE2 (Davis, 2014, 192). Organizations also need structured project management practices to stay ahead of their competitors by shortening the time-to-market, to increase their operational effectiveness and to increase the level of accountability related to organization working towards their objectives, values and mission (Camilleri 2016, 29).

Based on Vaskimo's study (2015, 183) the project management structure was identified as the most important part of project management methodologies among the case organizations. The study also reveals the most important benefits acquired when using the project management methodologies:

1. provides or enables common way of working
2. recycles best practises or lessons learned and avoids re-inventing the wheel
3. enables and enhances project management and reaching agreed targets
4. provides structure and prevents chaos

Among the reasons mentioned above, also the following reasons were highlighted: enhances communication, comprehension, reporting & info exchange, enables or enhances development of project management & project management skills, enables on-boarding of new staff, enables or enhances project commensurability, enables exchange/sharing of project personnel, enhances risk management and enables keeping & focusing on customer promises. (Vaskimo 2015, 194.)

Kerzner (2017, 14) points out rather similar advantages gained when implementing a good flexible methodology: shorter project schedules, improved control of costs, fewer or no unwanted scope changes, better execution plan, better customer relations, more accurate prediction of results, better visibility on status for management, standardized executions and ability to adopt best practices.

Kerzner (2014, 204) also presents the benefits of a standard methodology by separating them in short-term and long-term benefits:

- "short-term benefits:
  - decreased cycle time and lower costs

- realistic plans with greater possibilities of meeting time frames
- better communication as to “what” is expected from groups and “when”
- feedback: lessons learned
- long-term benefits:
  - faster “time to market” through better scope control
  - lower overall program risk
  - better risk management, which leads to better decision-making
  - greater customer satisfaction and trust, which leads to increased business and expanded responsibilities for the tier 1 suppliers
  - emphasis on customer satisfaction and value-added rather than internal competition between functional groups
  - customer treating the contractor as a “partner” rather than as a commodity
  - contractor assisting the customer during strategic planning activities”

Vaskimo’s (2015) conclusions based on his study are that project management methodologies structures and contents are unique. Therefore it can be concluded that there is no one and only methodology that fits for all. Study also states that methodologies used in the organizations are combinations of different methodologies. The reasons why certain combinations are chosen is based on the organizational context: the areas where organizations see they have the most challenges in and areas where they can increase the quality and success are most likely to be in the focus.

Also Kerzner (2017, 14, 16) mentions that it is not usually possible for the organization to create a methodology that applies to all situations. He states that project management methodologies usually reflect the organization’s maturity level on project management as well as the prevailing culture. Agile enough methodologies allow project managers to tailor and choose the best suitable components for individual project which is possible with reasonable maturity level and the culture that supports trust, effective communication and cooperation. Methodologies that rely on too strict policies, guidelines and documentation don’t serve the purpose of efficient and precise project management and restrict the ability to tailor methodology to fit the situation.

Wells (2012) also studied the benefits of the project management methodologies and found out that they are considered quite controversial. His study revealed that project management methodologies are considered useful when they are supporting and guiding project managers with lower level of tacit knowledge or experience in project

management. Findings also revealed that almost half of project managers think that project management methodologies are non-beneficial and are more likely to slow down their work instead of offering support and guidance. Project management methodologies were considered more as tools for management, control and compliance. (Wells 2012, 57.)

### 2.3 Project governance

Project governance is critical element of any project as it is the way to oversight the project and to ensure the success of the project. Project governance framework usually consists of structure, processes, decision-making models and tools. (Project Management Institute 2012, 53.)

PMBOK® GUIDE (Project Management Institute 2012, 54) highlights the following examples of project governance framework:

- Project success and deliverable acceptance criteria
- Process to identify, escalate, and resolve issues
- Relationships between the parties (project team, organization and stakeholders)
- Identified project roles and organizational chart
- Communication procedures
- Decision-making process
- Guidelines to align project governance and organization's strategy
- Project life cycle
- Stage gate processes and needed reviews for phases
- Approval and review processes for changes outside of project manager's responsibility

Some of these elements are described more detailed in the following.

#### 2.3.1 Project life cycle

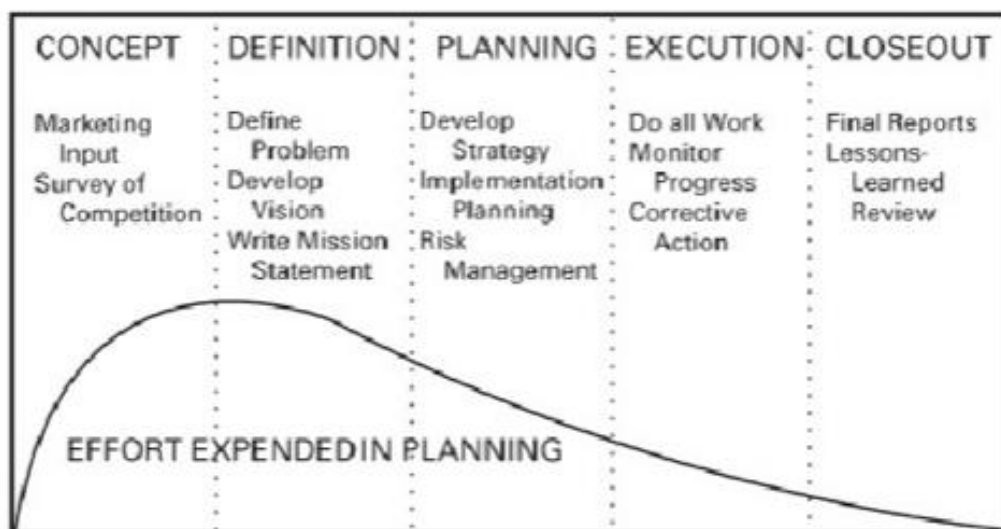
Projects always have starting and ending point and project life cycle consists of different phases that project passes in between them. Phases and their contents may vary depending on the organization, project, industry etc. The project life cycle is the high



level framework for project management despite specific deliverables and activities executed within the project. Generic project life cycle consists of initiation, planning, executing and controlling and closing. During the project the project manager and the team must perform different types of activities such as developing, reviewing, analyzing and understanding the scope, creating a structured project plan, execute the required activities to produce the project deliverables and measure and monitor the progress and take corrective actions if needed. (Project Management Institute 2013, 57, 82.)

The amount of phases of the life cycle and the names of the phases can be determined the way that best suits the company or project. Therefore the phases mentioned before are not actually phases but groups of processes that can be iterated as necessary. (Snyder 2013, 8; Project Management Institute 2013, 71–72.) Even though the phases are described in chronological order there can be situations where processes can't be executed in that order, eg. when the project needs to be reviewed and replanned or even restarted (Heagney 2011, 25). Turner (2014, 341) states that even though projects go through a sequence of phases and processes related to them, the phases or processes overlap and can be repeated many times. Therefore he points out that projects don't precisely follow cycle since after closure they do not return to beginning as the term life cycle usually suggests.

Heagney (2011, 21) describes the relation of different life cycle phases and effort expended in planning: more planning is required in the early phases of the life cycle and as the project proceeds the amount of effort reduces.



Picture 3. Effort expended in planning during project life cycle. (Heagney 2011, 21.)

Also Turner (2014, 357) points out that the planning and starting point of the project are crucial when it comes to the project success and therefore the value of well prepared start and planning should not be underestimated.

### **Initiating the project**

Before the project scope and outcomes are decided it may be worth to investigate what kind of alternatives there are to solve the problem. By carrying out preliminary study it's possible to find out what alternatives exists and to analyze them. After this feasibility study will help to compare the most promising alternatives and find out whether they are feasible or not. (Turner 2014, 364).

In PMBOK® Guide initiation phase covers the processes that are needed to authorize the project or in larger complex projects in each phase of an project. This phase also enables creating the shared understanding between the the project team and sponsors, customers and other stakeholders of the project's scope, purpose, success criteria, and expectations towards the project. Business case in this phase also helps to determine the costs and benefits however also other aspects should be taken into consideration as well. (Project Management Institute 2013, 73–74; Snyder 2013, 17.)

Heagney (2011, 25) describes this phase to be the one where project is launched after it's decided to be executed. In this phase the project charter is created to document the authorization and it includes definitions for authority, responsibility and accountability of the project team. This improves the project team's understanding of what is required of them.

Wells and Kloppenborg (2015, 21–22) also point out that the most important things to do in this phase after the project is selected and resources assigned (project manager, sponsor at least and ideally also the project team) are to identify stakeholders and create the project charter. They suggest creating the project charter for three reasons; to give common understanding of the project's purpose and why project is done, to document the budget estimates, risks, milestone schedule and approval requirements and finally to authorize the project manager and team to proceed. (Wells and Kloppenborg 2015, 21–22.)

Kerzner (2014, 198) defines the initiation phase as organizing phase determining what needs to be accomplished and how the objectives will be fulfilled. He describes the

project charter forming sort of a contract between the parties and therefore setting the boundaries for the project.

In this phase it is important to identify the stakeholders and analyze their variable roles and needs as well as project's expectations towards them to ensure the project success and avoid issues during the project execution. Stakeholders can be internal or external and their expectations and impact on the processes or outcomes can play significant role. By prioritizing the stakeholders it's possible to find out who are the key stakeholders regarding the interest and power towards the project. It's important to build a relationship with them as their support and commitment for the project is more beneficial than having them opposing the project. (Wells and Kloppenborg 2015, 41.)

**Project Stakeholder Power Interest Grid**

		Interest	
		Low	High
Power	High	<b>High Power, Low Interest</b> – Keep Satisfied <ul style="list-style-type: none"> <li>• Marketing Manager</li> </ul>	<b>High Power, High Interest</b> – Manage Closely <ul style="list-style-type: none"> <li>• Operations Manager</li> <li>• General Manager</li> <li>• Finance Director</li> </ul>
	Low	<b>Low Interest, Low Power</b> – Apathetic <ul style="list-style-type: none"> <li>• Team members working on-site</li> </ul>	<b>Low Power, High Interest</b> – Keep Informed <ul style="list-style-type: none"> <li>• Team leads working on-site</li> </ul>

Picture 4. Example of project stakeholder prioritization matrix. (Wells and Kloppenborg 2015, 41.)

Project charter is a key document to be created in this phase. It summarizes the project: why it should be done and what is the outcome of the project as well as preliminary estimations of investments, risks, time frame and approval requirements. It helps to make the decision whether the project is worth to launch or not. (Wells and Kloppenborg 2015, 21–22.)

### The Three Ws, Rs, and Cs of Project Charters

3 Ws	3 Rs	3 Cs
What (scope overview)	Risks	Communication needs (stakeholder list)
Why (business case)	Resources	Collection of knowledge (lessons learned)
When (milestone schedule with acceptance criteria)	Routines (team operating principles)	Commitment (signatures)

Picture 5. Example of the project charter content. (Wells and Kloppenborg 2015, 22.)

Snyder (2013, 18) describes the project charter content to include:

- Project purpose or justification
- Project description
- High-level requirements
- Measurable objectives
- Success criteria
- High-level risks
- Summary milestone schedule
- Summary budget
- Stakeholder list
- Approval requirements
- Project manager authority
- Name and authority of authorizer

#### Planning the project

As in the earlier phase the high-level understanding of the project has been created, in this phase it's time to make the more detailed plans for project execution. It includes listing and sequencing the required activities, identifying resources, estimating durations and identifying potential risks and finding the acceptable balance among them. The planning continues throughout the project and plans need to be updated and refined during the phases. (Snyder 2013, 23–25; Project Management Institute 2013, 74.)

Heagney (2011, 23) describes this phase to provide answers for following questions:

- What must be done?
- Who will do it?
- How should it be done?
- When it must be done?
- How much will it cost?
- How good does it have to be?

The project charter created in the earlier phase provides help for more detailed planning and gives input for project plan. Project plan usually covers for example documented requirements, plans for managing communications, costs, human resources, procurement, quality, schedule, scope and stakeholder as well as baselines for cost, schedule and scope. (Snyder 2013, 29.)

### **Execution and controlling of the project**

The execution phase covers the processes to perform the actions at required level specified in the project plan. It requires actions such as managing and directing the project team and available resources to execute the project deliverables. When it comes to controlling the project, the progress and performance of the project need to be monitored in order to discover and react to situations where the changes are required. This means continuous information gathering and comparing the work to the plan and it requires frequent communication with project team. The earlier the issues are identified the easier it usually is to react and solve them. (Project Management Institute 2013, 75; Turner 2014, 94–95.)

In order for the project to be managed effectively it's important that project specification and objectives are clarified and aligned with the resources and time frame. To mitigate risks of overspending or delays the possible changes during the project need to be executed properly. Also essential is project manager's ability to manage projects and communicate in needed level as well as the support provided for the project manager by higher management. (Turner 2014, 380.)

### **Closing the project**

In the closing phase the PMBOK® Guide includes all the actions required to formally close the project or the phase or in some cases to hand-over the deliverables to other organizational units. Closing the project or phase usually consists of

- formal acceptance of the project deliverables
- review
- documenting the impacts to other processes and updating the process assets
- lessons learned
- storing all the documentation to be used in the future
- determining of relevant agreements
- team performance evaluation and releasing the resources

(Project Management Institute 2013, 76.)

Besides gathering lessons learned Wells and Kloppenborg (2015, 106–107) mention this phase to include the acceptance of deliverables, providing feedback for team members and their supervisors and also completing any tasks or issues needed to be finished.

### 2.3.2 Roles and responsibilities

#### **Project sponsor**

Project sponsor is a person, who is in higher position in organizational level and is accountable of enabling the project success by providing the funding and resources. Project sponsor participates in the project initiation and provides authorization for the project or any changes required during the project. Project sponsor's role is to ensure the project is aligned with the organization's or company's strategy and the project is proceeding accordingly to plans. For the project to be successful and proceeding effectively it's important that project sponsor gives support for the project manager and helps when issues are escalated by project manager or are beyond the project manager's control. (Snyder 2013, 13–14; Project Management Institute 2013, 52; Camilleri 2016, 114.)

#### **Project manager**

Project manager is the key resource who is responsible of creating the plan that ensures the project to be accomplished within the approved boundaries by implementing effective and accurate communication, planning, execution and control of the project (Project Management Institute 2013, 14, 54). Besides that the project managers job is also to lead the project team and make sure people in the project team are performing on the required level to ensure the project deliverables. It's not an easy task as project

managers don't have the same authority on project team members as their supervisors do. Project manager's inability to lead people in the project team can't be compensated no matter how well project manager performs in technical aspects and therefore project manager's people skills are crucial too. (Heagney 2012, 31–34; Project Management Institute 2013, 56.) Project manager is also responsible for gathering and providing regular status reports towards project sponsor and other stakeholders (Camilleri 2016, 115.)

Project manager's most important areas of expertise are communication, technical skills, leadership, planning, team building and stakeholder management. The most effective way of leading the project teams is by an example. To support the project execution well it's important that project manager creates an environment where people feel safe enough to bring up any issues or delays and methods to quickly communicate and provide help. (Wells and Kloppenborg 2015, 40, 95.)

### **Project team member**

Besides the project manager the project team also includes several individuals who together carry out the work needed for the project to achieve its goals. There can be also different type of supporting experts in the project team and their level of participation can vary a lot depending on their role, skills and knowledge. They can be responsible for example of contracting, legal or testing. Sometimes project team can also include external participants in the role of customer, end-user or business partner. (Project Management Institute 2013, 55–56.)

Characteristics to look for when choosing the right project team members are eg. commitment, flexibility, sense of urgency and trust in the project manager as a leader. Also understanding the reasons behind team members motivation can be beneficial as well as specific skills and competences related to project are worth identifying as it helps when assigning the tasks to them. The role of the project team member can also be called SME (subject matter expert) who has unique experience but only participates in the project planning, implementation and decision making when needed to give input for the project and not participating in actual work (Wells and Kloppenborg 2015, 37–38).

### **Committee**

In larger complex projects governance can be carried out by a steering committee or project board that usually consist of a group of people in executive positions. Their

responsibility is to overseeing the progress to meet the corporate goals, to provide guidance and resolve issues as well as addressing the matters causing potential issues. (Camilleri 2016, 116.)

### 2.3.3 Decision-making

Working on projects is all about making decisions despite the role you have in the project. Often the decisions need to be made under pressure or without all the information available so in order to make the decisions it's important to know what information is needed and when there's enough to make a decision. To make good decisions requires transparency and information provided at the right time. (Wells and Kloppenborg 2015, 102.)

The project management methodologies also improve project governance: by not having clear processes, well prepared plans, objectives and responsibilities the project will most likely face challenges. Besides roadmap for the project manager to follow project governance also provides support and control for the decision making in the project. Project governance also includes decision making in areas such as expectations, accountability, responsibility or performance and it makes decision-making more efficient while trying to ensure no harmful decisions are made in the project. Project governance is usually separated from the project management methodologies as every project has different governance. Project governance can be undertaken by the project sponsor or a committee depending on the project. (Kerzner 2014, 143, 145–146.)



## 3 PROJECT MANAGEMENT BEST PRACTICES AND KEY SUCCESS FACTORS

### 3.1 Project management best practices

Kerzner (2014, 14–15) defines the term of best practice in project management as a process, method, activity or technique that is proven in practice to be effective and ensuring the better outcome than any other method with fewer problems. However he also states that describing some method as a best practice doesn't mean that methods used previously would have been wrong or harmful (Kerzner 2014, 19).

Defining project management best practices for organization is not a one time work to be done. Instead gathering the best practices is continuous improvement that leads towards gaining more business value in the long run. Also the definition of project management best practices are not something that can be fully agreed on; what they are depends on the organization and the situation. (Kerzner 2014, 1–2, 19, 196.)

Kerzner (2014, 19) describes the typical definition of best practice as something that

- works
- works well
- works well on repetitive basis
- leads to competitive advantage
- can be identified in a proposal to generate business
- that differentiates from competitors
- keeps the company out of trouble and in case of trouble, assists in getting out of trouble

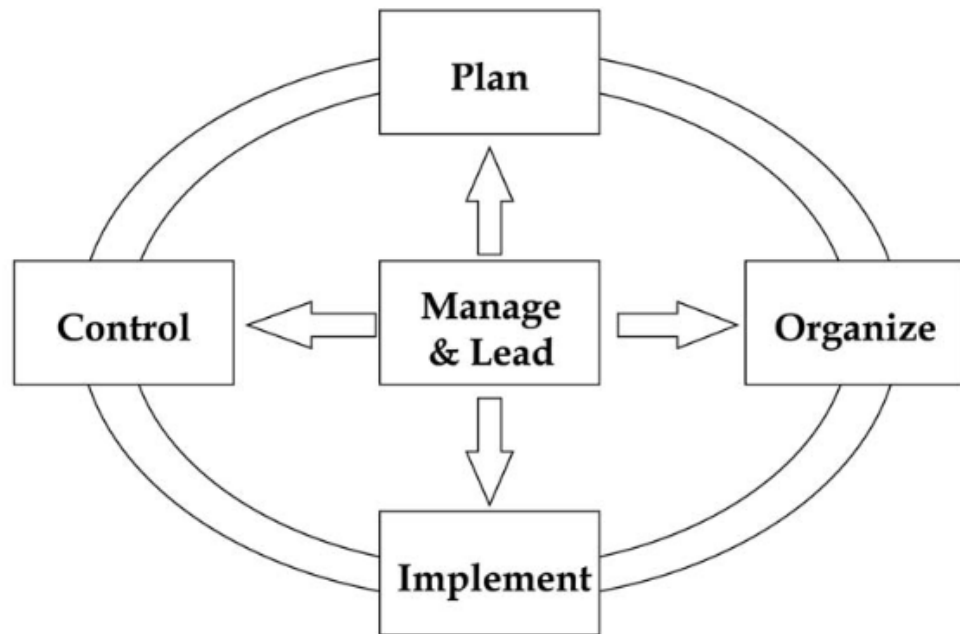
When Kerzner's definitions mentioned before are quite high-level and universal, there are more practical approaches as well. A Guide to the Project Management Body of Knowledge known as PMBOK® Guide contains globally recognized good practices and is referred as a standard guide of project management. There are in total of 47 different project management processes in the PMBOK® Guide covering the project life cycle phases. These processes related to all phases are grouped as knowledge areas. PMBOK® Guide suggests that these knowledge areas are used in projects and could

therefore be utilized as collection of best practices. These knowledge areas are put together in Picture 4. (Project Management Institute 2013, 78, 80; Turner 2014, 2.)

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
<b>4. Project Integration Management</b>	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work	4.4 Monitor and Control Project Work 4.5 Perform Integrated Change Control	4.6 Close Project or Phase
<b>5. Project Scope Management</b>		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
<b>6. Project Time Management</b>		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Resources 6.5 Estimate Activity Durations 6.6 Develop Schedule		6.7 Control Schedule	
<b>7. Project Cost Management</b>		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	
<b>8. Project Quality Management</b>		8.1 Plan Quality Management	8.2 Perform Quality Assurance	8.3 Control Quality	
<b>9. Project Human Resource Management</b>		9.1 Plan Human Resource Management	9.2 Acquire Project Team 9.3 Develop Project Team 9.4 Manage Project Team		
<b>10. Project Communications Management</b>		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Control Communications	
<b>11. Project Risk Management</b>		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses		11.6 Control Risks	
<b>12. Project Procurement Management</b>		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	12.4 Close Procurements
<b>13. Project Stakeholder Management</b>	13.1 Identify Stakeholders	13.2 Plan Stakeholder Management	13.3 Manage Stakeholder Engagement	13.4 Control Stakeholder Engagement	

Picture 6. Project management processes grouped into knowledge areas. (Project Management Institute 2013, 80.)

Project management best practices presented above represent the technical aspect rather than human aspects. Turner (2014, 347) has been using the same project management process for 25 years and it consists of both technical and human aspects as part of the project management process. As the picture 7 illustrates in the center of the process is also leadership besides management:



Picture 7. The project management process. (Turner 2014, 347.)

### 3.2 Key success factors in project management

Project success can be determined afterwards by evaluating how did the project meet with the scope, time, cost, quality, resources and risk assessments and testing the output (Project Management Institute 2012, 54). Wells and Kloppenborg (2015, 3) describe the project to be successful when it's implemented on time and on budget while everything is completed and working correctly and customer satisfaction is obtained. However it is important to notice that based on Davis' (2014, 199) study, the success factors are not always common between the senior management, project core team and project recipients and therefore it's very important to agree beforehand on the project perceptions among these groups.

Project management key success factors are most commonly related on the effective project management but also to the human aspects as the following success-failure dimensions were identified (in order of priority):

1. Project planning and control
2. Project strategic fit
3. Project scope
4. Employee commitment and participation

(Camilleri 2016, 57.)

Turner (2004, 349) points out four conditions that are required in order for the project to be successful. However even if the conditions are met it won't guarantee success as there might be other reasons affecting the project outcome negatively.

1. The success criteria for the project needs to be agreed and clarified with stakeholders before the project starts.
2. Communication between the project manager and the project owner needs to be at high level as well as people working on project must work well together.
3. The level of structure needs to be at suitable stage providing the framework by the owner to the project manager to work within in a flexible way.
4. The regular reporting of project performance by the owner leads to more successful projects and creates transparency on the performance.

(Turner 2004, 349–350.)

Also Jitpaiboon et. al (2019) revealed in their study that the project management tools, project management best practices and managerial support are equally important to project success. It was also found out that good relationships between the people working in the project as well as clear and well prepared plans introduced to project team to follow during the project enhance the project performance. (Jitpaiboon et. al 2019, 284–285.)

In the long term, more efficient way of utilizing the projects executed in the past is the formal gathering of the lessons learned. By analyzing and documenting these will help the organization to learn and to increase the level of competence in project management in the long term as well as help to avoid making the same mistakes all over again. (Wells and Kloppenborg 2015, 106.)

Documentation in needed level is not only helpful during the project but it's important to organization to utilize the past experiences in projects that will be executed in the future. Ability to make use of past plans and documentation increases the effectiveness of future project planning. To find out whether any similar project were executed and how in the past and can give an insight on mistakes to avoid, successful practices or technologies and strategies that did or did not work. (Snyder 2013, 28; Heagney 2012, 39; Turner 2014, 361.)

## 4 DEVELOPMENT PROJECT IN COMPANY X

### 4.1 Current state in company X

This thesis is commissioned by the organization in the company X. In the heart of the organization's business is sales through a large network of external partners. Many people in the organization are more or less working on projects depending on their role. The scale of the projects carried out varies a lot; from smaller pilots and projects related to developing organization's internal everyday processes to more complex projects carried out with external partners. The strategy and business models in the case organization have been under critical evaluation and changes have been implemented during the past couple of years and that work continues. In relation to that it was noticed that also the way projects are implemented and managed needs to be evaluated and developed to improve the project management competence.

In the case organization projects and project management are in the center of the business. There are people in the different roles participating in the projects. Project managers are in most of the cases Key Account and Development Managers. Other people participating in the projects come from operative units such as field sales or sales support. Also company's internal stakeholders are highly involved, eg. legal, marketing, product & pricing and IT and system support. Also in many projects external partners are involved. However in many projects the core project team can be fairly small and sometimes only consists of the project manager and stakeholders and no project team members are assigned.

At the moment there are no structured, commonly agreed guidelines for how projects should be implemented in the case organization. People have very different amount of expertise when it comes to project management and project managers and people working on projects rely on their own expertise and knowledge. Also the business environment where organization has to be capable to meet with partner's requirements and provide solutions in very short time requires structured and efficient project management. Because of these reasons projects are carried out in very different ways depending on the people involved in the project. For example one project can be struggling with issues that at the same time are easily avoided in others. Corporate guidelines and models for project management of course exists. They are mainly used

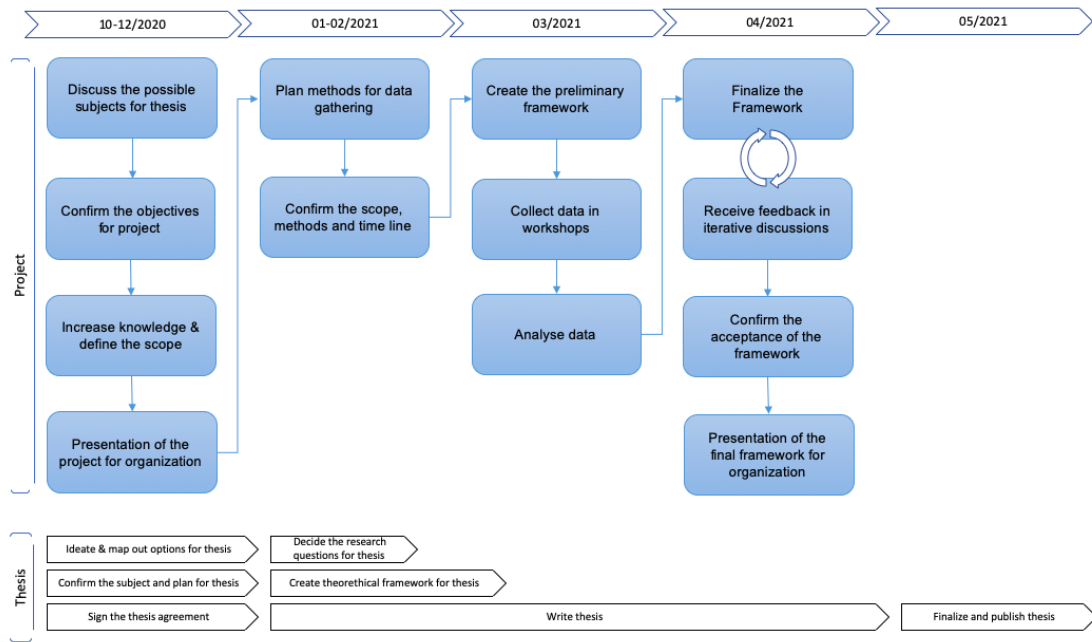
for larger-scale company-wide IT-projects and therefore seen too heavy and not suitable to be utilized in projects carried out within the organization. One step closer to evening out these gaps between different projects and increase project management competence in general is to create a common framework for project management for the organization. This framework was created and delivered for the case organization in addition to this thesis.

#### 4.2 Development project

The need for this project was brought up by the commissioner since it has been realized that there are no common ways or guidelines of how the projects are carried out in the case organization. This could be improved by creating the concrete framework to support the project managers as well as increasing the transparency throughout the organization of how the projects should be managed. The idea behind this is to improve the success and increase efficiency of projects as well as increase the competence among project work.

The project started in October 2020, when the need for this framework was identified and it was confirmed being suitable subject for thesis. Project started out with familiarizing with the subject and clarifying the scope and objectives. After that the more detailed plan was created including the methods for data collection, needed meetings with the project sponsor and scheduling the tasks. After the plan was confirmed the data was collected in several workshops and interactive discussions with the people working in the organization. The content for the framework was created based on the research findings and iterative discussions with project sponsor and finalized based on the feedback. The high level development process is described in the picture 8. below.





Picture 8. The high level process and timeline for project and thesis.

### 4.3 Data collection

Content for the framework was collected from different sources;

1. from the people working in the organization, mainly as project managers
  - a. Key Accounts and Development team, total of four people including the team lead
2. from the people working in the organization, mainly as internal stakeholders
  - a. Operational team leads, in total of two people
3. Head of business unit

#### 4.3.1 Workshops

When it comes to the project managers, who work in the Key Accounts and Development team, the purpose was to find out what they consider the most important activities or best practices related to project management. The aim was to find out what specific methods or actions they use and value in their daily work. The managements (team leads and head of business unit) input was gathered also to make sure that their point of views were taken into consideration. The operational team leads usually participate in the

projects as stakeholders so it was seen important to also find out what they see as best practices or areas where project management should be improved in their point of view. In both cases the input was gathered using collaborative research methods as people's involvement was seen crucial in creating the framework.

The data was mainly collected in four separate workshops; three of them with the Key Accounts and Development team and one with the operational team leads. The content of the workshops were quite similar however the Key Accounts and Development team's workshops were divided into three separate workshops to avoid too heavy sessions and ensuring people's motivation and focus. The subjects were divided as follows:

- Project Initiation and Planning
- Project Execution & Control and Project Closure
- Roles & Responsibilities & Decision Making

With the operational team leads all of the areas were covered during one workshop.

There were two methods used in the workshop; people were given pre-assignments to familiarize and orientate themselves with the subject. During the workshops participants were first working in pairs to change ideas and filling them into the template provided for them. Then the findings were gathered and discussed in the group. Due to the small group of participants there was a risk of someone not being able to attend so the back up plan was then not to form pairs and work in the group instead. Working in pairs was chosen as method since then it can be made sure that everyone has to participate actively. Everyone were able to attend in the workshops however in one Key Account and Development team's workshop the participants worked in a group instead of pairs since two of the participants were attending late. Workshop was successful when it comes to the results even as people were working in the group of four people. However it was seen that then some people were staying more back and not participating as actively. This was taken care of by the facilitator who was asking direct questions from these people also and that way made sure everyone's input was gathered.

Findings in the workshop were collected by the participants in the Powerpoint templates prepared beforehand and additional notes were gathered in Microsoft Excel by the facilitator. All this data was then compiled in Microsoft Excel for further analysis.

#### 4.3.2 Iterative discussions

To make sure the content of the framework will be aligned with the objectives and serve its purpose the iterative discussions were held regularly with the project sponsor. That way it was possible to develop and get feedback during the process. Before implementing the framework it was presented for the organization's management and also additional feedback and development areas identified were presented. Feedback was also asked from organization management group to receive their final input and development suggestions. Meeting notes were written to document the requirements and ideas in each meeting for further development.

Since the project management consists of many elements it was realized early on that the framework could easily expand and not being able to carry out in the limits of this thesis. Because of that it was decided with the project sponsor what were the main focus areas to narrow the scope. Also the idea of the framework allows and also requires further development and updating so it was agreed that at this point it would only include the project life cycle and the actions related to them, key documents and tools available to support project management. During the project it was also brought up by both groups of participants that meeting culture needed some structure and guidelines and also the decision making process is considered challenging and unclear. During the project the project sponsor suggested to include the decision making process in the framework too.

#### 4.4 Research findings

After gathering the data from workshops data was analysed using categorization. The tool used was Microsoft Excel as it provided easy and suitable functionalities for basic categorization. This was needed even though the workshops were structured based on the categories since in the workshop not all items were added in the correct phase right away and new ideas were brought up while discussing. Categorizing also made it possible to analyse how many times different topics were brought up. In each category the data was grouped based on the nature of the items. Categories used in analysis were

- Project life cycle phase: initiation, planning, execution & control and closure
- Role: project manager, project team member, project sponsor, stakeholder and steering group

- Decision making
- General comments

The collected data and data source will be presented below grouped by categories and themes.

#### 4.4.1 Project life cycle

In the project life cycle category it can be seen that the Initiation and Planning phases are the ones that includes 60% of the data related to this category. In Initiation and Planning phases it was seen important to include many activities especially related to planning. Planning was highlighted also in the Closure phase so planning was seen important at the end of the project as well. Data under each phase will be presented more detailed after the table below.

Table 1. The amount of data in each category under Project life cycle.

<b>Rivotsikot</b>	<b>Määrä / Category (phase)</b>
<b>Initiation</b>	<b>15</b>
High level planning	7
Assessment	4
Strategy & prioritization	2
Project description	2
<b>Planning</b>	<b>15</b>
Planning	8
Stakeholder mangement	4
Reporting	1
Documentation	1
Meetings	1
<b>Execution &amp; Control</b>	<b>11</b>
Stakeholder mangement	3
Control	3
Reporting	2
Meetings	1
Tools	1
Documentation	1
<b>Closure</b>	<b>9</b>
Planning	3
Organization culture	2
Documentation	2
Assessment	1
Communication	1
<b>Kaikki yhteensä</b>	<b>50</b>

### Category: Initiation

There were many best practices and needed activities identified for the initiation phase. The need for reviewing the project alignment for organization strategy (strategic evaluation) and priorities (project alignment to business priorities) were identified as well as thorough assessment of whether the project should be carried out or not (define customer value, pros and cons assessment, business case and formal decision whether to proceed or not). Also activities related to high level planning (high level execution plan, high level time frame, estimated resources required, choose governance model, identify internal and external stakeholders and dependencies, identify streams & high level areas related to project and determine responsibilities and project team) and description of the project (description of the problem to be solved and objectives) were considered as best practices.

Category (phase)	Group (theme)	Item	Source
Initiation	Assessment	Define customer value	Key Account & Development team
Initiation	Assessment	Pros & Cons assessment	Team Leads
Initiation	Assessment	Formal decision whether to proceed or not	Team Leads
Initiation	Assessment	Business Case (qualitative and/or quantitative)	Key Account & Development team
Initiation	High level planning	High level execution plan	Key Account & Development team
Initiation	High level planning	High level time frame	Key Account & Development team
Initiation	High level planning	Estimate resources required	Key Account & Development team
Initiation	High level planning	Choose governance model	Key Account & Development team
Initiation	High level planning	Identify internal and external stakeholders and dependencies	Key Account & Development team
Initiation	High level planning	Identify streams & high level areas related to project	Key Account & Development team
Initiation	High level planning	Determine responsibilities and project team	Key Account & Development team
Initiation	Project description	Description of the problem to be solved	Key Account & Development team
Initiation	Project description	Objectives	Key Account & Development team
Initiation	Strategy & prioritization	Strategic evaluation	Key Account & Development team
Initiation	Strategy & prioritization	Project alignment to business priorities	Key Account & Development team

Picture 9. The data and source in the category called Initiation.

### Category: Planning

In the Planning category the main activities identified were naturally related to planning (risk mapping, requirement gathering, project plan detailed enough and timeline for tasks, determine roles and responsibilities and go through with the project team, exit-plan for future, choose the relevant approach; test&learn vs full automation and find out resources and IT workload, plan for further development and follow-up and plan for go-live/into production) but also to stakeholder management (project prioritization and commitment with stakeholders, plan for hand-over to operative business, stakeholder communication and stakeholder involvement already in planning phase). Both the Key Accounts & Development team and team leads identified the detailed enough project plan and timeline for tasks and plan for further development & follow-up being very

important. Also having kick-off meetings, documenting the processes and variables, determining the KPI's and planning the reporting were mentioned as best practices.

Category (phase)	Group (theme)	Item	Source
Planning	Planning	Risk mapping	Key Account & Development team
Planning	Meetings	Kick off meetings	Key Account & Development team
Planning	Stakeholder mangement	Project prioritization and commitment with stakeholders	Key Account & Development team
Planning	Stakeholder mangement	Plan for hand over to operative business	Key Account & Development team
Planning	Stakeholder mangement	Stakeholder communication	Key Account & Development team
Planning	Planning	Requirement gathering	Key Account & Development team
Planning	Planning	Project plan detailed enough and timeline for tasks	Key Account & Development team, Team Leads
Planning	Planning	Determine roles and responsibilities and go through with the project team	Key Account & Development team
Planning	Planning	Exit-plan for future	Key Account & Development team
Planning	Documentation	Documentation of processes and variables	Key Account & Development team
Planning	Planning	Choose the relevant approach; "test&learn" vs full automation and find out resources and IT-workload	Key Account & Development team
Planning	Stakeholder mangement	Stakeholder involvement already in planning phase	Team Leads
Planning	Planning	Plan for further development and follow-up	Key Account & Development team, Team Leads
Planning	Planning	Plan for go live/into production	Team Leads
Planning	Reporting	Project KPI's and plan for reporting	Key Account & Development team

Picture 10. The data and source in the category called Planning.

### Category: Execution and Control

In the Execution & Control category the main findings besides naturally controlling the project (react to issues; identify the reason and escalate early, as project manager delegate tasks and agree dead lines, monitor the level of commitment of the project team) were again related to stakeholder management (communicate internally; background and reasoning, finalize the plan for hand over and maintenance or follow-up, stakeholder feedback and participation as early as possible & ensure understanding of their responsibility). Again the Key Accounts & Development team and team leads both brought up the importance of participating the stakeholders as early as possible in the project. Also reporting (budget follow-up and timeline follow-up), documentation (documentation; meeting notes, decisions, changes, risks and solutions) and meeting culture (regular and well prepared status meetings) were identified as best practices. Two available tools (MS Teams and Miro good tools) were mentioned useful in project management.

Category (phase)	Group (theme)	Item	Source
Execution & Control	Tools	MS Teams and Miro good tools	Key Account & Development team
Execution & Control	Reporting	Budget follow-up	Key Account & Development team
Execution & Control	Reporting	Timeline follow-up	Key Account & Development team
Execution & Control	Control	React to issues; identify the reason and escalate early	Key Account & Development team
Execution & Control	Control	As project manager delegate tasks and agree deadlines	Key Account & Development team
Execution & Control	Stakeholder magement	Communicate internally; background and reasoning	Key Account & Development team
Execution & Control	Documentation	Documentation; meeting notes, decisions, changes, risks and solutions	Key Account & Development team
Execution & Control	Meetings	Regular and well prepared status meetings	Key Account & Development team, Team Leads
Execution & Control	Control	Monitor level of commitment of the project team	Key Account & Development team
Execution & Control	Stakeholder magement	Finalize the plan for hand over and maintenance or follow-up	Key Account & Development team
Execution & Control	Stakeholder magement	Stakeholder feedback and participation as early as possible & ensure understanding of their responsibility	Key Account & Development team, Team Leads

Picture 11. The data and source in category called Execution & Control.

### Category: Closure

In the category Closure many items related to planning (identify, prioritize and set dead lines for remaining tasks, clear plan for follow-up after pilots or projects, required actions to be taken and agree on roles and responsibilities related to post project phase) were highlighted. Also documentation (store project documentation available to everyone (Teams) and formal closing of the project & documentation) was considered important. Two items related to organizational culture (celebration of project closure & give and receive recognition of good work and feedback sessions with project team) were considered important in the closure phase. Also assessment (project success review), communication (knowledge sharing; present project shortly for organization) were highlighted.

Category (phase)	Group (theme)	Item	Source
Closure	Documentation	Store project documentation available to everyone (Teams)	Key Account & Development team
Closure	Planning	Identify, prioritize and set dead lines for remaining tasks	Key Account & Development team
Closure	Assessment	Project success review	Key Account & Development team
Closure	Organization culture	Feedback session with project team	Key Account & Development team
Closure	Organization culture	Celebration of project closure & give and receive recognition of good work	Key Account & Development team
Closure	Communication	Knowledge sharing; present project shortly for organization	Key Account & Development team
Closure	Planning	Clear plan for follow-up after pilots or projects, required actions to be taken	Team Leads
Closure	Planning	Agree on roles and responsibilities related to post project phase	Team Leads
Closure	Documentation	Formal closing of the project & documentation	Team Leads

Picture 12. The data and source in category called Closure.

#### 4.4.2 Roles & Responsibilities

In the category called Roles & Responsibilities most of the data belongs to categories related to Project manager, Project sponsor and Project team members. It's natural since the project manager is the one managing the projects. On the contrary in the Steering

group category the amount of data is lowest. Reason for it might be that not many projects so far has been wide enough to require the steering group structure for governance and therefore not too many people have experience on that. Also many of the steering group responsibilities are similar to project sponsor responsibilities. The data under each category will be presented more detailed after the Table 2.

Table 2. The amount of data in categories under Roles & Responsibilities.

Riviotiskot	Määrä / Category (phase)
Roles & Responsibilities: Project Manager	11
Roles & Responsibilities: Project Sponsor	9
Roles & Responsibilities: Project Team Members	9
Roles & Responsibilities: Stakeholders	6
Roles & Responsibilities: Steering Group	4
<b>Kaikki yhteensä</b>	<b>39</b>

### Category: Project manager

Key Accounts & Development team found the most important responsibilities of the project manager being to coordinate and being responsible of the whole project and having overview of the project. Also facilitating the work, delegating, reporting, information sharing, requirement gathering and budget follow-up were seen as the main responsibilities. From the team leads point of view two items were considered important: project manager should provide feedback of project team members' performance for their supervisors and also agree the tasks and responsibilities with stakeholders or at least provide information of the tasks and responsibilities.

Category (role)	Item	Source
Roles & Responsibilities: Project Manager	Coordination of the whole project	Key Account & Development team
Roles & Responsibilities: Project Manager	Responsible of the project entity	Key Account & Development team
Roles & Responsibilities: Project Manager	Facilitates the work	Key Account & Development team
Roles & Responsibilities: Project Manager	Delegates tasks	Key Account & Development team
Roles & Responsibilities: Project Manager	Reporting	Key Account & Development team
Roles & Responsibilities: Project Manager	Information sharing	Key Account & Development team
Roles & Responsibilities: Project Manager	Requirement gathering	Key Account & Development team
Roles & Responsibilities: Project Manager	Budget follow-up	Key Account & Development team
Roles & Responsibilities: Project Manager	Provide feedback of project team members to the team leads	Team Leads
Roles & Responsibilities: Project Manager	Agree tasks and responsibilities with stakeholders or inform them	Team Leads
Roles & Responsibilities: Project Manager	Summary/Overview	Key Account & Development team

Picture 13. The data and source in category called Roles & Resonsibilities: Project Manager.



### Category: Project sponsor

When it comes to the project sponsor it was considered important to provide support, approve high-level changes and make final decisions. Also project sponsor was seen responsible of high-level requirements and scope, prioritization of investment decisions and strategic alignment. Project sponsor was also described as the owner and the champion of the project.

Category (role)	Item	Source
Roles & Responsibilities: Project Sponsor	Owner of the project	Key Account & Development team
Roles & Responsibilities: Project Sponsor	Provides support throughout the project and especially in case of escalation	Key Account & Development team
Roles & Responsibilities: Project Sponsor	High level requirements & scope	Key Account & Development team
Roles & Responsibilities: Project Sponsor	Approves changes in the high level	Key Account & Development team
Roles & Responsibilities: Project Sponsor	Makes final decisions	Key Account & Development team
Roles & Responsibilities: Project Sponsor	Prioritization	Key Account & Development team
Roles & Responsibilities: Project Sponsor	Investment decisions	Key Account & Development team
Roles & Responsibilities: Project Sponsor	Strategic alignment	Key Account & Development team
Roles & Responsibilities: Project Sponsor	Champion of the project	Key Account & Development team

Picture 14. The data and source in category called Roles & Responsibilities: Project sponsor.

### Category: Project team member

As project team members it was considered important to be committed to the project, support the project team, bring out ideas and opinions and participate in active level. Project team members are responsible of the tasks assigned to them and their area of expertise as well as performing the tasks in time. Also proactively highlighting possible issues or blockers was seen important. Team leads also brought up that project team members are responsible of sharing the information related to the project within their own teams as well as gathering input from their own team to the project team when necessary. It was also mentioned that it's not always clear to all project team members what is expected of them so it would be necessary to provide information to them by the project manager.

Category (role)	Item	Source
Roles & Responsibilities: Project Team Members	Responsible of the assigned tasks and area of own expertise	Key Account & Development team
Roles & Responsibilities: Project Team Members	Proactive highlight of issues/blockers	Key Account & Development team
Roles & Responsibilities: Project Team Members	Committing to project	Key Account & Development team
Roles & Responsibilities: Project Team Members	Supports the project team	Key Account & Development team
Roles & Responsibilities: Project Team Members	Brings out ideas and opinions	Key Account & Development team
Roles & Responsibilities: Project Team Members	Performs assigned tasks on time	Key Account & Development team
Roles & Responsibilities: Project Team Members	Responsible for sharing information in the team related to the project or gathering input from the team for the project	Team Leads
Roles & Responsibilities: Project Team Members	Not clear to everyone what is expected, information needs to be provided	Team Leads
Roles & Responsibilities: Project Team Members	Active participation instead of just showing up	Key Account & Development team, Team Leads

Picture 15. The data and source in category called Roles & Responsibilities: Project team member.

### Category: Stakeholders

As a stakeholder it was considered important to understand the project purpose, provide needed information and bring their own expertise and viewpoints to the project. It was seen beneficial that stakeholders participate in an active level and proactively highlight the potential issues and blockers. Their role was described as a “guests” who participate when appropriate. By the team leads it was highlighted that they wish that their team members would participate in the projects more often in the future instead of themselves. In that case it needs to be ensured that the relevant information flows in the organization.

Category (role)	Item	Source
Roles & Responsibilities: Stakeholders	Proactive highlight of issues/blockers	Key Account & Development team
Roles & Responsibilities: Stakeholders	Active participation	Key Account & Development team
Roles & Responsibilities: Stakeholders	Brings own expertise & viewpoints for project	Key Account & Development team
Roles & Responsibilities: Stakeholders	Participates when appropriate “Guest”	Key Account & Development team
Roles & Responsibilities: Stakeholders	Hoping for team members joining projects more instead of team lead, information flow needs to be ensured	Team Leads
Roles & Responsibilities: Stakeholders	Understand the project purpose and gather/provide needed information	Key Account & Development team

Picture 16. The data and source in category called Roles & Responsibilities: Stakeholders.

### Category: Steering group

There were least comments on the category Steering group, perhaps because the projects carried out by the organization usually are not complex enough to need the steering group’s governance. Also it was brought up that many times the project sponsor responsibilities are comparable with the steering group responsibilities. It was identified that the steering group responsibilities are defining the strategic alignment, making final decisions and ensuring the support within the company. They also represent their organization’s needs and requirements in the project.

Category (role)	Item	Source
Roles & Responsibilities: Steering Group	Defines strategic alignment	Key Account & Development team
Roles & Responsibilities: Steering Group	Makes final decisions	Key Account & Development team
Roles & Responsibilities: Steering Group	Ensures the internal support within company	Key Account & Development team
Roles & Responsibilities: Steering Group	Represents the organizations/parties involved	Key Account & Development team

Picture 17. The data and source in category called Roles & Responsibilities: Steering group.

#### 4.4.3 Decision making

In the Decision making category the data related to Information and Processes are highlighted based on the amount of data in them as can be seen in the Table 3 below. The data in this category is presented in more detailed after the Table 3.

Table 3. The amount of data in categories under the Decision making.

Riviotiskot	Määrä / Category (phase)
<b>Decision making</b>	<b>14</b>
Information	5
Process	5
Information	1
Documentation	1
Responsibilities	1
Monitoring	1
<b>Kaikki yhteensä</b>	<b>14</b>

When it comes to decision making many improvement areas were identified even though it wasn't in the scope of the workshops. The data was mapped based on the themes they are related to: process, information, responsibilities, documentation and monitoring. The most improvement areas identified were related to decision making process and information sharing.

In the process theme group the following things were identified: the decision making process is unclear, more structured decision making process is needed in general and in organization's steering group and decision making is considered inefficient and it's hard to get matter aligned. Also it was identified that it's not possible to create process that works for every decision making situation. Team leads who often are involved when making decisions brought up that often the timing of decision making is not correct: people are not informed beforehand that decision needs to be made and no supporting materials are provided beforehand. That was considered essential to being able to make decisions.

Related to information it was identified among the Key Accounts & Development Team that at first it should be identified who is needed for decision making, it's not clear what information is needed for decision making, it takes time when additional information is asked and it should be informed in the meeting invitation what decision needs to be made. Team leads on the other hand brought up that many times it's unclear for the ones making the decision what needs to be decided and materials provided don't support the decision making. Also they expect concrete proposals and justification behind them to be presented to support decision making.

Category (phase)	Group (theme)	Item	Source
Decision making	Process	Decision making process is unclear	Key Account & Development team
Decision making	Process	More structured decision making process is needed in general and in organization steering group.	Key Account & Development team
Decision making	Information	We should identify what is required to make decisions.	Key Account & Development team
Decision making	Process	Decision making is considered inefficient and things are not aligned well enough. Maybe the reason behind it is that we don't have common understanding of what we're doing.	Key Account & Development team
Decision making	Information	It's not clear what information to provide for decision making for project sponsor.	Key Account & Development team
Decision making	Information	It takes time to make the decision if additional information is always needed.	Key Account & Development team
Decision making	Process	It's hard to create a general process for decision making since it depends on the problem and context how decision is made.	Key Account & Development team
Decision making	Responsibilities	Everyone involved in the decision making is responsible for familiarizing with the matter and provided material beforehand, eg. In organization steering group.	Key Account & Development team
Decision making	Information	It would be beneficial to inform whether the meeting's purpose is to make decision or is it just informative. Meeting invitation should contain the agenda and needed decisions.	Key Account & Development team
Decision making	Documentation	Decisions made should always be written down in the memo.	Key Account & Development team
Decision making	Monitoring	After the decision is made it should be monitored and evaluated.	Key Account & Development team
Decision making	Information	For the decision maker it's often unclear what needs to be decided. Materials don't provide needed information.	Team Leads
Decision making	Information	To support decision making the project team should present concrete proposals and justifications behind them.	Team Leads
Decision making	Process	The timing of asking the the decision to be made is sometimes not correct. People haven't been informed that decision needs to be made and no materials are provided beforehand. No one should expect the decision to be made in these circumstances. Decision maker should be given opportunity to prepare for making the decision.	Team Leads

Picture 18. The data and source in category called Decision making.

#### 4.4.4 General additional comments

This category consists of more general comments brought up during the workshops but were out of the scope of workshop. These comments were documented in Excel during the workshop by the facilitator. These comments usually were about current challenges people are facing when working on projects and also some new ideas were brought up. Afterwards these comments were analysed too by categorizing them based on their theme. Categories and the amount of comments are presented in the Table 4 below.

Table 4. The amount of data in categories under General comments.

<b>Riviotzikot</b>	<b>Määrä / Category (phase)</b>
Information sharing	13
Working methods	10
Competence & Attitudes	8
Meetings	8
Project approach	7
Responsibilities	7
Culture	4
Prioritization	3
<b>Kaikki yhteensä</b>	<b>60</b>

As it can be seen in the chart the most comments were related to Information sharing and Working methods. Also comments related to Competencies & Attitudes, Meetings, Project approach, Responsibilities were made. A few comments were also related to Prioritization and Culture. Comments in each category are presented in more detailed below.

#### **Category: Information sharing**

Information sharing group includes comments related to transparency, tools, processes and collaboration. It was identified that transparency of ongoing activities as well as collaboration needs to be increased throughout the whole organization. As a solution it was suggested that there should be a tool to follow up on activities and monthly info meeting could be organized. It was also mentioned that sometimes confidentiality is the reason why information can't be shared with everyone at the same time. Also it was brought up that the projects need to be officially closed.

Category (phase)	Group (theme)	Group2	Item	Source
General comment	Information sharing	Transparency	Transparency for on going initiatives	Team Leads
General comment	Information sharing	Transparency	With better information sharing and transparency things proceed effectively.	Key Account & Development team
General comment	Information sharing	Transparency	It should be transparent throughout the organization what we're working with even if the projects haven't officially been launched yet.	Team Leads
General comment	Information sharing	Transparency	We should consider having one monthly meeting for the whole organization to share information of on-going activities. It should be informational and not include discussion nor require too much preparation or materials. At the moment people are attending several meetings where same topics are being discussed. This way the team meetings could be fully for the team's purposes.	Team Leads
General comment	Information sharing	Transparency	The lack of information sharing can be seen eg. when an already advanced case is presented for the organization steering group and it's the first time some people find out about it.	Team Leads
General comment	Information sharing	Transparency	Not sharing information is often justified on a confidentiality basis even inside the organization. Information is sometimes shared with one team while not with the other.	Team Leads
General comment	Information sharing	Transparency	Often some activities are not included in the materials or team pipelines even if they are already worked on. Is it too much work to update materials?	Team Leads
General comment	Information sharing	Tools	We should have a tool where we can see what we're working with before the project is officially launched.	Team Leads
General comment	Information sharing	Process	We should formally close the projects.	Team Leads
General comment	Information sharing	Collaboration	Stakeholders should be involved as early as possible, often some areas are ignored too easily, eg. Reporting.	Key Account & Development team
General comment	Information sharing	Collaboration	It's important that the Head of business unit is aware of the project status and shares the same views with the project team. This will help the project to proceed and in case escalation is needed.	Key Account & Development team
General comment	Information sharing	Collaboration	Operative teams should be involved already in the initiation phase of the project.	Team Leads
General comment	Information sharing	Collaboration	The focus of the steering group meetings is not clear, it was supposed to be for decision making but the purpose is unclear.	Team Leads

Picture 19. The data and source in group called Information sharing.

### Category: Project approach

There were several comments made related to project evaluation and a few comments related to work pace. It was identified that evaluation should be made more critically and projects should be suspended if not cost-effective. Also related when evaluating the business case the qualitative aspects should also be evaluated and measurable KPI's should be set for projects. It was also mentioned that the busy pace of work is the reason why eg. reacting to risks upfront is hard and the partner's fast time to market increases the pace of work.

Category (phase)	Group (theme)	Group2	Item	Source
General comment	Project approach	Evaluation	Critical evaluation throughout the project is needed	Key Account & Development team
General comment	Project approach	Evaluation	Projects should be terminated in case not cost-effective.	Key Account & Development team
General comment	Project approach	Working pace	Partners require fast time to market so we need to be able to provide quick solutions.	Key Account & Development team
General comment	Project approach	Evaluation	Time span estimation should be more realistic.	Key Account & Development team
General comment	Project approach	Working pace	It's important to map risks, but instead of reacting to risks it usually is only documenting them. Lack of time often the reason.	Key Account & Development team
General comment	Project approach	Evaluation	In addition to calculating the business case, we should also evaluate the effect and qualitative aspects to our business.	Key Account & Development team
General comment	Project approach	Evaluation	Measurable KPI's should be identified and followed-up. What will improve?	Key Account & Development team

Picture 20. The data and source in group called Project approach.

### Category: Working methods

Many comments made were related to organization's working methods. These comments were grouped in Abilities, Planning and Balance. Comments related to organization's abilities were that instead of risk oriented approach the focus should be more solution-based to be able to find alternative solutions and organization should increase the level of agility in general. Also the need for common ways of working were mentioned. Balance between the time spent in the documentation versus working on the matter and wish to avoid too heavy gate approval processes were also brought up. Related to planning it was mentioned that the project framework created will hopefully provide help in project planning. The scope of the project expanding often too wide and estimating the required resources were considered challenging.

Category (phase)	Group (theme)	Group2	Item	Source
General comment	Working methods	Abilities	Often the approach is more risk oriented rather than solution-based.	Key Account & Development team
General comment	Working methods	Abilities	Identifying alternative solutions is often inadequate; we should think "How this could be carried out?"	Key Account & Development team
General comment	Working methods	Abilities	Common ways of working for everyone	Team Leads
General comment	Working methods	Abilities	We should use more "Quick&Dirty" solutions and try things more.	Key Account & Development team
General comment	Working methods	Abilities	We should discuss how to be more agile in general.	Key Account & Development team
General comment	Working methods	Balance	To find the balance between too heavy gate approval processes and project manager's own ability to plan; too heavy processes should be avoided.	Key Account & Development team
General comment	Working methods	Balance	There should be a balance between how much we put effort and time into producing materials vs. actually working on the matter.	Team Leads
General comment	Working methods	Planning	Framework will hopefully help in project planning.	Key Account & Development team
General comment	Working methods	Planning	Project scope often expands too much and therefore PM feels exhausted before project has even started.	Key Account & Development team
General comment	Working methods	Planning	It's hard and sometimes impossible to estimate or predict required resources, eg. We should make estimates even if partner doesn't even have the product for sale yet.	Key Account & Development team

Picture 21. The data and source in group called Working methods.

### Category: Competence and attitudes

Under the group Competence and Attitudes there were comments related to leadership, motivation and resources. Most of the comments were related to the project manager's leadership competence: stakeholder's approach and ways of working, delegation and level of commitment within the project team. Also motivation was seen having effect on projects: project manager's own motivation and capabilities as well as project team members' or stakeholders' level of experience and motivation to participation in projects. Also it was brought up that there are not enough resources in the organization to carry out quick initiatives.

Category (phase)	Group (theme)	Group2	Item	Source
General comment	Competence & Attitudes	Leadership	All stakeholders often have risk oriented and problem-based approach on things.	Key Account & Development team
General comment	Competence & Attitudes	Leadership	Good plans are not in relation to daily work since we should somehow get our stakeholders to change the way they act.	Key Account & Development team
General comment	Competence & Attitudes	Leadership	To assign responsibility among project team requires project manager's ability to delegate, this is also a possibility for project manager to learn.	Key Account & Development team
General comment	Competence & Attitudes	Leadership	The level of commitment varies among people and makes it hard to get things done.	Key Account & Development team
General comment	Competence & Attitudes	Motivation	Everyone isn't experienced in working on projects, people assigned based on their motivation. Some people never want to participate and it's not reasonable to assign them in projects.	Team Leads
General comment	Competence & Attitudes	Motivation	Project manager's level of courage and faith in the project has big impact in trying new things.	Key Account & Development team
General comment	Competence & Attitudes	Motivation	To motivate oneself for the project is hard when the project is prioritized by some other people. This can be seen among us and stakeholders.	Key Account & Development team
General comment	Competence & Attitudes	Resources	We have low resources to carry out quick initiatives.	Key Account & Development team

Picture 22. The data and source in group called Competence & Attitudes.

### Category: Meetings

It was identified during the workshops that meeting culture is something that should be improved in general, not only in projects. It was mentioned that with external partners the meeting practices are better but internally they should be improved. Effective meeting culture was considered to help in prioritization and proceeding with matters. Many comments were related to meeting facilitation: to provide enough information of the meeting agenda and purpose beforehand, organizer's ability to facilitate discussion and meeting content as well as making notes and sharing them afterwards.

Category (phase)	Group (theme)	Group2	Item	Source
General comment	Meetings	Facilitation	We should lead discussion towards making decisions during the meetings instead of only discussing the matter in several meetings.	Key Account & Development team
General comment	Meetings	Facilitation	Usually meetings don't have clear agenda and it's unclear whether preparing is needed beforehand or not.	Key Account & Development team
General comment	Meetings	Facilitation	Meeting notes on agreed matters should be send afterwards.	Key Account & Development team
General comment	Meetings	Facilitation	Efficient status meetings consists of: what's done and what's not, why something is not done, when will it be done and by whom. Memo should be written and shared.	Key Account & Development team
General comment	Meetings	Participants	We should only invite relevant participants for the meetings. Now when working more remotely it seems to be more usual that people are invited "just in case".	Team Leads
General comment	Meetings	Practices	Meeting practices need to be improved	Key Account & Development team
General comment	Meetings	Practices	Meeting culture is working well with external partners but internally we should improve.	Key Account & Development team
General comment	Meetings	Practices	Effective meeting culture helps to proceed and prioritize.	Key Account & Development team

Picture 23. The data and source in group called Meetings.

### Category: Responsibilities

Comments made about responsibilities were mainly related to project manager's responsibilities but also to project sponsors role and further development of the project outcome. Project manager's role is experienced often lonely and the workload too heavy. Also it was identified that roles and responsibilities should be agreed upon in the



beginning and project managers should delegate more instead of doing everything by themselves. Project sponsor's role was highlighted as a support provider and champion for the project. It was also mentioned by the team leads that the project team should take responsibility of the further development of project outcome or processes.

Category (phase)	Group (theme)	Group2	Item	Source
General comment	Responsibilities	Project sponsor	It's important for project sponsor to champion and show support to the project; to say why something is being done and why it's important.	Key Account & Development team
General comment	Responsibilities	Further development	Project responsible of developing from manual process to concept	Team Leads
General comment	Responsibilities	Further development	It is project's responsibility to develop the processes further from manual towards automation after the project.	Team Leads
General comment	Responsibilities	Project manager	Being project manager is often lonely, other people only attend meetings to listen or comment.	Key Account & Development team
General comment	Responsibilities	Project manager	Project manager is often in double role: project manager and project team member/specialist so the workload is massive.	Key Account & Development team
General comment	Responsibilities	Project manager	Even if the project manager is responsible for many areas in the project, we should challenge the project manager's role and delegate more tasks to others. Eg. Reporting and information sharing could be assigned to someone else.	Key Account & Development team
General comment	Responsibilities	Project manager	It should be highlighted in the framework that in the early phases of the project the roles and responsibilities are agreed and project manager's role is to delegate tasks.	Key Account & Development team

Picture 24. The data and source in group called Responsibilities.

### Category: Prioritization

A few comments were made about prioritization: it's considered hard and unclear how projects are prioritized in between. This concerns the projects carried out outside of agile methods as some of the projects organization carries out are following agile model with clearer prioritization. It was also identified that it's important to ensure the commitment for the project on the management level in the beginning to make sure that everyone involved in the project are dedicated in needed level.

Category (phase)	Group (theme)	Item	Source
General comment	Prioritization	Prioritization between the projects is unclear.	Key Account & Development team
General comment	Prioritization	It's important that everyone is committed already in the early phase of the project and the commitment should be ensured also on the management level.	Key Account & Development team
General comment	Prioritization	Multiple on-going projects makes it hard to prioritize in between. Agile ways of working will provide clearer prioritization process.	Key Account & Development team

Picture 25. The data and source in group called Prioritization.

### Category: Culture

Also couple of comments were made concerning the culture in the organization: it was seen important to create a culture where giving feedback is continuous and where respect is shown by giving recognition of the work done. Also during the projects it was

considered important for the project manager to receive support from team members and also to have good team spirit.

Category (phase)	Group (theme)	Item	Source
General comment	Culture	Culture of giving continuous feedback among organization	Key Account & Development team
General comment	Culture	To create team spirit is important for the project team.	Key Account & Development team
General comment	Culture	It's meaningful for project manager to gain proactive support from project team, eg. People volunteering to tasks.	Key Account & Development team
General comment	Culture	Give and get recognition of the work done	Key Account & Development team

Picture 26. The data and source in group called Culture.

#### 4.4.5 Project sponsor requirements

Project sponsor's requirement were gathered in several iterative discussions and feedback session during the project. In the beginning it was determined that this project management framework should include the most important activities and tasks related to project effective and high quality project management. Also roles and responsibilities were seen important to be described. During the project the need for decision making process was identified on the project sponsors side as well as during the workshops so it was decided to be added in the framework. Also project sponsors wish was that framework included the description of tools available to support project management as well as some examples of key documents as everyone might not be familiar with them. Based on the feedback and input from the project sponsor the final framework was created in Powerpoint and visualized conceptually.

## 5 CONCLUSIONS

### 5.1 Achieving the research objectives

The objective for this case was to increase the project management competence and create common ways working on projects to support the efficient and high-quality project business in the case organization. Early on it was decided that the first step for the case organization to improve project business would be to create a project management framework that describes how the projects are carried out. Structured methodologies and frameworks that support project management are proven to provide common way of working, enhancing project management, enabling reaching agreed targets, preventing chaos, increasing success and reducing costs (Vaskimo 2015, 183; Kerzner 2017, 14; Kerzner 2014, 204). These areas are to be developed in the case-organization as well. Based on the findings of the thesis the key content areas for the framework will be presented in high-level and suggestions on how the framework could be implemented and further developed are provided in this section.

The reasearch questions identified at the beginning of the study were

1. What are the case organization-specific requirements and best practices needed or used in order to manage projects efficiently and systematically?
2. What key areas of project management the framework should cover?

At the beginning it was difficult to determine the scope of the project too strictly as it was identified that the research findings of this thesis will affect on the final content of the project management framework. It was then accepted that the final content was created based on the findings however the initial scope was determined when agreeing on the objectives of the project with commissioner.

The study confirmed the beforehand made conclusion: the framework shouldn't be too heavy with detailed processes as all projects are unique and therefore it's difficult to make it suitable for every situation (Kerzner 2017, 16–17). Instead the framework was created in form of a guideline that can easily be customized case-by-case basis according to need. It was seen important to try to avoid that the framework would be considered too bureaucratic and heavy to follow by project managers as Wells (2012, 57) had found out is common. To avoid that scenario the content for the framework was

created in tight collaboration with the case-organization's personnel so that they can feel being part of the development process and their opinions and ideas were taken into account.

The answers for the research question 2 are based on data collected during the research and gathered for the theoretical framework. In order to answer the research question 2 it required the research question 1 to be answered as the high-level content was created based on the findings of research question 1. Before the study project life cycle and roles and responsibilities were identified as probable key areas of project management framework. Based on the research findings the roles and responsibilities were also seen important to be described in the framework. In addition, during the study several other areas were highlighted: decision-making process, tools available to support project management and key documents. The key high-level areas for the final framework was constructed as following:

- Project Life Cycle: Initiation, Planning, Execution & Control, Closing
- Roles & Responsibilities
- Decision Making
- Tools
- Key Documents

The high-level areas identified during the research were quite similar to the key areas of project management methodologies and frameworks pointed out by Vaskimo (2015, 189), PMBOK GUIDE (Project Management Institute 2012, 54) and Kerzner (2017, 19) as they highlight documents and templates, guidelines, role definitions, tools, project life cycle and decision-making process among others. Based on the research findings the need for the common framework was confirmed as many organization-specific best practices and also challenges were identified related to the areas mentioned above. Based on the findings the content for each area was created and validated with the case-organization. These findings together with the theoretical framework provide answers for the research question 1. The key content for each area is presented below.

### **Project life cycle**

Often the challenges faced by projects are due to inadequate planning (Heagney 2012, 15). Based on the research findings the need to increase and improve planning overall

in the case organization's projects was evident. It was identified that the planning often is not done in needed level especially when it comes to initiation phase. The fact that activities related to planning were considered best practices in almost all of the project life cycle phases supports the need of improvement in this area. Also Heagney (2011, 21) states that planning is included in every phase of the project life cycle and the need of effort expended in planning is highest in the early phases.

The framework will provide support for planning as it now includes the identified best practices and key documents. For example creating a project charter in initiation phase contains the high-level plans. The project charter is considered as the key document in creating the groundwork for the project (Kerzner 2014, 198; Wells and Kloppenborg 2015, 21–22; Snyder 2013, 18). As the effort spent in the planning will increase it will also increase the need of documentation. This will naturally take more time compared to before but on the other hand it also provides more detailed information of the required resources, estimated time frame and increase transparency and mutual understanding. These will increase the propability of projects succes overall. Well made plans also help as the project proceeds: managing the scope, work and dead lines in execution phase as well as reviewing the project in closing phase (Turner 2014, 357).

Project closure was seen as the phase that often is neglected as after completing the end deliverables the focus might already be on the next projects. Closing the project formally will ensure that the remaining tasks will be executed and everyone involved are aware of the project closure. Based on the research findings best practices included in this phase were eg. planning and agreeing on the handover, maintenance, future development and follow-up, gathering lessons learned and reviewing the projects as well as celebrating and giving feedback to one another. PMBOK® Guide (Project Management Institute 2013, 76) and Wells and Kloppenborg (2015, 106–107) include all of the actions mentioned before except celebrating to be included in the closing phase.

### **Roles & Responsibilities**

Roles and responsibilities should be determined as it increases the understanding of what is expected from each project member. This was identified as a best practice and area to be improved in the organization as many challenges identified could be related to different perceptions of the participants' roles. The framework covers this area in two ways: as best practices carried out in the project life cycle and as a description of key

roles and responsibilities. In the project life cycle it's highlighted that the roles and responsibilities should be agreed on very early to ensure the required resources and commitment as well as to clarify the participants' roles. This applies to both, the management level as well as the project members. Also during the project it's then easier for the project manager to delegate more tasks to people assigned when the roles are clear for everyone. Also based on the project management theory especially in the initiation phase it's possible to create shared understanding between the project team and sponsors, customers and stakeholders, improve project team's understanding of what is required of them and build beneficial relationships with the stakeholders and therefore it's important to clarify the roles and responsibilities (Heagney 2011, 25; Project Management Institute 2013, 73–74; Wells and Kloppenborg 2015, 41).

The descriptions of the key roles and general responsibilities related to them were decided to be included as in many projects there are people involved from the operational teams with limited experience in project work. To ensure that everyone is aware of their responsibilities the knowledge needs to be increased also among the operational teams as well as among everyone participating in the projects. The project managers should go through what's expected of the team members during the project and before meetings but also team leaders should make sure to go through this with their team members. The descriptions in the framework can be referred in these discussions. This way it's possible to increase the knowledge among the case organization related to the roles and responsibilities in projects.

Several other organization-specific responsibilities to be clarified in the framework were identified. In addition the roles and responsibilities were described based on the theory of project management. The most critical organization-specific responsibilities related to each role were

- Project manager: to determine and agree on project teams' roles and responsibilities, to delegate tasks, to share information and provide feedback for team leaders related to project team members
- Project sponsor: to participate actively in planning in the initiation phase, to provide support for the project team and to champion the project in the organization.
- Project team members: to participate actively with solution-oriented approach, to take responsibility of the tasks assigned, to highlight potential challenges and to bring out new ideas and solutions

- Stakeholders: to understand the project purpose and commit to it, provide the needed information on time and to take an active part in resolving the matter in their area of expertise.

## **Tools**

Tools that support project management methodology or framework are considered helpful in managing projects. Yet they don't replace proper planning and more agile and lighter the framework is the more difficult it is to create a tool to support all situations. Also it's stated that organization don't fully take advantage of existing tools. (Kerzner 2014, 236–239.) As the case-organization is now starting to develop their project management practices it was justified that at this point the framework only presents the tools available. Also the need for certain tools did not emerge in the study and therefore it can be assumed that the issue is not central at this stage. However this is something that the case-organization definitely could look into in the future.

## **Decision-making**

Decision-making process was identified as area to be improved in general by all; Key Accounts & Development team, operational team leads and the head of the business unit. Therefore this process was added to the framework as it's own area. Even though the project management framework itself also provides support and control for the decision making in the project it was seen important to describe the general process as the challenges were related more to the general process rather than project governance (Kerzner 2014, 143). The main challenge is that the process is unclear: who is responsible of what, who to participate and when, what information needs to be provided for people making the decision and when. Of course the general process will not be applicable to all situations and smaller matters won't require this heavy process. Also it was noticed that decision making process is not only project-related process but it also covers other situation requiring decision-making in the organization. To solve these current challenges the decision-making process highlights that

- it should be clarified who is in power of making the decision
- people should be participated in making the decision only when relevant based on their role

- the potential solutions and background data or information should to be gathered
- potential solutions should be analysed
- supporting material and information should to be provided beforehand for the people making the decision
- people making the decision should take time to familiarize themselves with the provided materials

Based on Wells and Kloppenborg (2015, 102) being able to make good decisions requires transparency and information at the right time as well as to understand what information is needed and when there's enough information to make decision. This supports the research findings mentioned above to be relevant to clarify the decision-making process in the organization.

### **Key documents**

As the planning increases and therefore more documentation is needed the framework also includes the key documents. These key documents are project charter, project plan, business case and closure report. Naturally many other project-specific documents are needed eg. in controlling the project. It was also identified that not everyone is necessarily familiar with the documents used in project management so they are also described briefly in the framework. The framework doesn't contain any ready made templates but instead it describes the content of the key documents and what information they should include. Also exemplary pictures of the different documents were added to the framework as appendix as well as links to the company's existing templates. Even though Vaskimo (2015, 189) points out that documents and templates are primary content of project management methodology it was decided to keep this area lighter to avoid creating too heavy documentation process and that way increasing the workload (Kerzner 2017, 16–17).

### **Additional development areas**

Also several additional development ideas were identified and these findings were also analyzed and utilized as appropriate when creating the framework. Some of the findings were outside of the scope of this thesis but together with key findings the summary of



additional ideas and development areas outside of the scope were provided for the case organization. The additional findings were

- the need to improve meeting practices
- the need to improve information sharing among the organization of the on-going activities
- the need for organization-wide monthly info meeting to improve information sharing
- the need for clear and common information sharing practices within the organization related to matters considered confidential
- the need for discussion on who to be more agile in general
- the need to clarify the purpose of the organizational steering group
- the need to create a culture where more feedback and recognition are given and successes are celebrated

## 5.2 Implementation and further development

As stated earlier this framework will not be perfectly applicable for each and every project or situation without adjusting it and for this framework to provide best value it is created to be flexible and light enough to be modified in case-by-case basis (Kerzner 2017, 16–17). This framework will guide towards making decisions more consciously since it requires consideration and discussion to determine how the framework should be utilized in each project or situation. To knowingly and reasonably omitting some parts of the framework will most likely to serve its purpose better compared to the situation where something is left undone due to the lack of knowledge, time or simply due to negligence.

To make this framework implemented efficiently and providing support it requires continuous development and updating to provide business value in the future. As the scope of this thesis is limited there are several areas related to project management that can be added to the framework in the future. For example the basic templates for the documentation could be created, budgeting and procurement processes could be described and the need for supporting tools or softwares could be evaluated. Also heavy commitment from management and project sponsor is essential to make sure that this framework is used in daily work. There are activities to support the change management and the framework implementation to be suggested for the organization. Without these

activities the framework will most likely not fully provide the intended support for the organization as it's common that challenges and resistance may occur when implementing new ways of working. (Kerzner 2014, 196.)

The commitment of the organization's management is crucial. As team leaders' and project sponsors' responsibility is to ensure that people in the organization are familiar with the framework and it's utilized in daily work. When implementing new To name product owner for the framework who then is responsible for updating the framework when needed, promoting the framework in the organization and supporting team leaders as well as receiving support from them will make the implementation more efficient. By naming the product owner it's ensured that the framework is up to date and also developed further. For future development it'd be necessary to get improvements ideas after the framework has been used for a while. Also this framework should be part of the onboarding process of the new employees.

To support the implementation and further development it's suggested that the Key Accounts & Development team members will name the upcoming and existing projects where they will utilize the framework and plan how they'll do it. Then after the appropriate time the framework could be revisited and validated to find out what worked well and how it could be improved. For the operational teams it's important to understand how the projects are carried out, what roles and responsibilities there are related to projects and especially what their contribution to projects is and how the decisions are made from now on. This requires effort from team leads as well as product owner.

After the certain period of time since implementation it would be beneficial to research how the framework is considered among the people in the organization and how well the implementation has succeeded. This way it would be possible to further develop the framework and project business in general. The fact that it was considered unclear how the projects are prioritized and the transparency and information sharing was hoped to be improved it would be beneficial to study the organization's project portfolio management in more detailed. Also it would be useful to map and identify the level of organization's project management competence to find out whether any additional training or courses should be provided related to project management.

### 5.3 Reliability and validity

With this thesis it was not intended to create new generalized information based on scientific research. Instead the purpose was to develop the case organization's project management competence by finding out the organization-specific best practices and key activities related to project management. Therefore the scientific reliability of this study can be evaluated based on systematic, analytical and critical nature of development activities as well as how the theory and practice are combined. The research methods used were collaborative methods and therefore it was possible to identify organization-specific activities and best practices as well as tacit knowledge related to project management (Ojasalo et al. 2005, 40). When collecting data in situations with high level of social interaction the disadvantage is to ensure that data is consistently high quality (Dey 2005, 77). This wasn't considered vital as the purpose was to focus in the organization-specific requirements and the nature of the framework is not final but requires continuous development afterwards. Also the fact that the research findings and the project management theory will be both combined in the final framework increases the reliability. Theoretical framework was also utilized in the beginning to understand the basics of the project management as a structure and to create the base for the data collection in the workshops. This way the data collected was accurate enough and provided information in line with objectives. (Ojasalo et al. 2015, 21, 40.)

The research findings were analysed using the grouping and categorizing which are common methods in qualitative research. The data analysis can be done in different ways and it affects on the interpretation of the results of the analysis. Categorization was made by one person and therefore represents subjective view of chosen data categories even though the the categories were chosen with careful consideration. When labelling the categories it was considered important for them to be meaningful based on the data as well as in relation to other categories. (Dey 2005, 101–103). Categorizing was made systematically and also the additional comments were taken into account and that increased the amount of information collected. Categorizing the data first based on in which area of framework item belongs to and after that grouping by the theme was considered most useful way in creating the framework. This way it was possible to identify the areas that were highlighted and needed to be in focus.

At the beginning it was difficult to predict the outcome of the research strictly as the research findings were to highly impact on the final output of the thesis. However the

research findings provided answers for the research questions and with the data gathered it was possible to provide clear development areas and data for the creation of the framework for the case organization. The amount of data gathered was higher than expected beforehand and therefore it was possible to find out many best practices and challenging areas as well as identify several additional development areas related to the case organization.

Because of the fact that the themes for the workshops were decided beforehand naturally had impact on the findings. If the methods used would have supported more open and general discussion the findings could have provided wider view on the potential development areas. However in that case the findings would not probably have been detailed enough to be used in creation of the framework and therefore the methods used support the objectives and increase the validity of this thesis. To increase the validity the case organization's main stakeholders inside the company could have participated. Therefore their viewpoints could have been taken into account but that wasn't possible due to the limited time frame.

## 6 SUMMARY

As projects are nowadays the key business in many companies it's important to develop the organizational project management business continuously. The project management methodologies created based on the organizational needs provide structure, increase efficiency and lead more often to successful project outcomes. They also can increase project management competence and provide support for the people working on projects. (Camilleri 2016, 29; Kerzner 2014, 204; Vaskimo 2015, 183, 194.)

For the case organization it was important to create common project management framework as there were no common guidelines or methods to support project management. This framework was seen as a tool to create a common understanding of how the projects are carried out in the organization and it's important to be created in the organizational context (Vaskimo 2015, 183, 207). With this case study it was possible to identify the organization-specific best practices and activities related to project lifecycle, roles and responsibilities, decision-making process, key documents and tools available to support the project management. In addition the study also revealed other development areas for the case organization to focus in the future.

The collaborative research methods combined with theoretical framework and systematic analysis of the research findings made it possible to provide new information for the case organization to improve their project management business. Based on the research findings it was possible to create the concrete project management framework which was provided for the case organization as attachment to this thesis. With the results of this thesis, committed management group and continuous improvements it is possible for the case organization to develop their project business even further as the process has now started.

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