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The changing roles of the PMO with the introduction of agile ways of working An exploratory research



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The changing roles of the PMO with the introduction of agile ways of working – an exploratory research

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Preface

"C'est le temps que tu as perdu pour ta rose qui fait ta rose si importante." [It is the time you spent on your rose that makes your rose so important] - Antoine de Saint-Exupéry

Dear reader,

Welcome to this thesis. It is the final step of my master's degree in Complex Systems Engineering and Management at TU Delft. This study addresses the impacts of agile in the roles of the PMO. The research was possible due to the support from Accenture. I want to acknowledge the effort and support of the PCS/NL team on connecting me to different clients for participating in the interviews conducted in this document. I am glad to have had the opportunity to work in such an engaging company.

I have to say I am very proud of handing in this work and sharing it with the public. It is the result of two years of intensive and challenging effort, which has been a thrilling experience for me. Not only for the knowledge I have gained but also for the precious opportunity to pursue a high-level education in the prestigious school that is TU Delft. I have quite enjoyed my time in this exciting and multicultural environment. But, undoubtedly, this last bit was the most fascinating. I hope you enjoy reading this work as much as I enjoyed writing it.

This achievement is not solely mine. I must give credit where credit is due. Starting with my family, the main contributor to my success thus far. From a very early age, my parents, Júlio Carneiro and Eveline Cleto, who taught me the value of education and supported me in every way growing up. I am remarkably lucky to have been born in such a warm and nurturing family. My grandparents, uncles, aunts, my sister, and cousins are considerate and supportive to incredible extents. I've learned that this is not for granted and I'm deeply grateful.

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I want to thank Grupo Cataratas, specifically Fernando Menezes, Bruno, and Ricardo Porto, for their extensive mentoring and challenging during my years at the company. But especially for their leap of faith and significant contribution so that this master program financially feasible for me. My friend, for several years, Lucas Teixeira, for first introducing me to the company.

Finally, last, but by no means least, my friends who are my family regardless of where I am. Throughout my life, I have moved from city to city, and so far, I have been able to surround myself with great company. If I were to name all who make my life worthwhile, it would take more pages than I'm allowed to use. I could not have it any better!

Henrique Cleto Carneiro

Amsterdam, January 2020

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Executive Summary

The Project Management Institute (PMI) defines the PMO as: "A management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques" (Project Management Institute, 2017, p. 40). In practice, PMO is a hypernym that can stand for program, project, or portfolio management office. The PMO is usually associated with stage-gate processes, monitoring, and controlling projects and has become a key element in traditional project management practices. Authors associate the PMO with an increase in the success rate of projects, reduce overall costs, and delivery time (Dai & Wells, 2004; Salameh, 2014). Which explains why firms replicate and modify it while adopting project-based structures and strategies (Thiry & Deguire, 2007). PMO designs vary across organizations, and some organizations implement more than one PMO with different mandates and different patterns of interactions (Müller, Glückler, & Aubry, 2013). Staffing the PMO is an overhead cost to projects, and seeking to optimize resources organizations tend to allocate more functions to them (Hobbs & Aubry, 2007). As a result, there is a broad range of activities a PMO can perform. This study found in literature 36 different functions associated with this structure.

Agile and traditional project management methodologies have fundamental differences in both planning and operational organization. Agile argues that overhead costs, requirements elicitation, and planning processes result in overspending and delaying innovative product development (Dybå & Dingsøyr, 2008; Meyer, 2014). These differences conflict with previously established roles, functions, and, more problematically, the people that perform them. In this sense, the introduction of agile ways of working is a disruption of traditional practices in the organization (Aubry, Hobbs, Müller, & Blomquist, 2010).

Agile has increasingly gained ground as a project management methodology disrupting traditional practices. Agile methodologies use self-organizing teams, and short iteration product development cycles, to cope and embrace the complexity of rapid-changing markets. Businesses who have adopted agile report benefits, including the reduction of project risk, lower time-to-market, better team morale (VersionOne, 2019). The positive results reported with the use of agile began to appeal to other industries due to their increased dependency on IT infrastructure and software.

The change to agile methods has effects of various aspects of a firm's organizational structure, including the PMO, a symbolic figure from traditional project management (Lines & Ambler, 2012). Agile standards have different approaches to the use of a PMO, and it is not clear whether the PMO in agile has similar roles and responsibilities as the PMO in traditional methodologies.

Although there is documentation associating the PMO with project success, there is not a precise definition of what the PMO is. Authors report its responsibilities ranging from risk management to administrative support, but there is a wide disparity between the descriptions of the PMO in the different studies and cases. This variety may indicate a gap of knowledge in the literature on identifying the roles of the PMO across firms. Especially on providing theoretical explanations on how a firm transition to agile impacts these roles. To address it, this thesis focusses on the role and responsibilities of the PMO on firms who have implemented agile methods in their IT organization within more than ten teams (Dingsøyr, Fægri, & Itkonen, 2014). In the cases this thesis explores, the core business is not software development. However, the IT organization is critical.

This thesis proposes to investigate the impact of the transition from traditional project management to agile on the PMO to address this gap. The main research question makes it explicit:

"How do the roles of Project/Program/Portfolio Management Offices change with the introduction of Agile methodologies to a large number of teams?"

This study adopted a descriptive exploratory approach to answering this question. The main question was divided into five sub-questions that guided the research. These are:

- 1. How does literature describe the PMO in traditional and agile approaches?
- 2. How do traditional and Agile standards describe the PMO?
- 3. How is the role of the PMO conducted in practice in organizations that have implemented Agile methodologies?
- 4. How is the de facto role of the PMO in organizations which have implemented Agile methodologies different from their past role under traditional methodologies?
- 5. What patterns emerge from the change in the PMO's roles and their organizational context?

The study observed the changes in the roles of the PMO before and after implementations of agile with four case studies. The research conducted semi-structured interviews and applied surveys with nine professionals in these different companies.

The study begins deriving a multidimensional framework to describe the PMO's role as literature accounts are scattered and incomplete. The study found that PMOs seem to perform similar functions within agile and traditional environments. However, the study has found indications that several responsibilities on the governance of projects are decentralized in agile as the development teams have increased autonomy enabled by process automation. As a result, the PMOs' participation is often reduced, or changed in the level of scope, or changed in the manner they are involved.

The number of cases this study observed is too small for conducting valuable statistical analysis on the quantitative data collected. Nevertheless, combining the qualitative data from the interviews and the quantitative information from the surveys, this study collected meaningful insights indicative of what happens with the transition to agile on the roles of the PMOs. Namely:

- 1. There seem to be significant differences between PMOs from different companies
- 2. The data analyzed from the cases in this thesis seem to indicate that the changes in roles of the PMO between the traditional period and the agile periods are related to the introduction of agile, although this study did not establish a causation relationship.
- 3. There are indications that PMO remains a crucial piece in the functions listed in the groups "Monitoring and Controlling Project Performance" and "Development of Project Management Competencies and Methodologies."
- 4. The change in the roles of the PMO is a reduction of the overall scope of the PMO and a shift from a predominant controlling role to a supporting and serving role.

The contribution to science of this study is twofold. First, it contributes to the description of the PMO, enriching the field towards a unified theory of project management. Second, it provides empirical evidence for the changes in roles of the PMO with the introduction of agile.

All topics addressed in this thesis are extensive: the PMO, project management, agile methodologies, and traditional methodologies. At several points on the design and development of the research, this study made choices to define the scope. Although it was not possible to address all fronts, the author offers this section to recommend future work following the efforts presented in this document.

This work is exploratory and gives insights on what are the changes to the role of the PMO. The recommendations for future work are related to the reasons why these changes would take place. Questions like "How does the socio-political landscape of the firm shape organizational change?" and "Which processes, or structures improve with the new form of the PMO in agile?" are two natural extensions to this research. The first one explores the impacts of agile in other positions of the organization associated with traditional project management. The second explores why and to whom

the structures described here are better or worse. The study investigated firms that have kept a PMO after introducing agile ways of work, further research should contemplate companies that didn't.

Disclaimer: This research was supported by Accenture B.V.

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1 Introduction

Agile methods have notably yielded positive results in the software development industry and became the standard in the segment. The fast innovation rate of this industry fueled the competitive pressure of releasing new products faster and be flexible to adapt to the changing market demands. Other industries are subject to similar pressures as their workforce becomes increasingly digitalized, and their segments globalized (Barabasi & Frangos, 2002, pp. 199-218; Kettunen, Laanti, Fagerholm, & Mikkonen, 2019). As a result, the adoption of agile (Conforto, Salum, Amaral, da Silva, & De Almeida, 2014) or some hybrid form of agile (Cooper, 2016) has been suggested or studied for other industries than software development and information systems technology.

Implementations of standardized agile frameworks are rare (Noll & Beecham, 2019). The PMI institute report that 23% of the 2018 respondents employ a hybrid, compared to 30% claiming to use agile (Project Management Institute, 2018). The process of changing the project management structure of a stablished firm usually encounters resistance. The use of hybrid frameworks could be a mitigation strategy to reduce this resistance (Cooper & Sommer, 2016). Some authors argue that agile cannot sustain multiple projects or large enterprises without incorporating traditional elements (Gill, Henderson-Sellers, & Niazi, 2018). Nevertheless, it is not rare to find large firms with several agile teams and traditional project managers, project sponsors, and PMOs (Fauser, Albrecht, & Abad, 2019). However, it is not clear whether these roles remain the same or whether they change with the introduction of agile.

This study focuses on the PMO. Although the phenomenon of resisting change is a well-documented topic (<u>Armenakis, Harris, & Mossholder, 1993; Coch & French, 1948</u>), the cover on the effects of agile on the PMO is not extensive. Authors investigate how the PMO can aid the transition to agile (<u>Hodgkins & Hohmann, 2007</u>), how the PMO should be in an agile environment (<u>Elatta, 2012; Pinto & Ribeiro, 2018</u>) and experience reports of establishing PMOs (<u>Tengshe & Noble, 2007</u>), but there are very few publications that observe existing PMOs in agile.

This study investigates if and how the roles of the PMO change with the introduction of agile to a large number of teams. Accenture motivated the choice to analyze the PMO. Accenture provides an extensive portfolio of consulting services that include planning and conducting agile transitions, coaching teams in agile practices, outsourcing project managers, PMOs, scrum masters, among others. Accenture was interested in the interface between PMOs and agile. This study, therefore, was initially motivated by the company's demand.

The Project Management Institute (PMI) defines the PMO as: "A management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques" (<u>Project Management Institute, 2017, p. 40</u>). In practice, PMO is a hypernym that can stand for program, project, or portfolio management office. Other names for the PMO include supporting office, center of excellence, and project office.

There is documentation associating the PMO with project success, and its responsibilities range from risk management to administrative support, but there is a wide disparity between the descriptions of the PMO in the different studies and cases. This variety may indicate a gap of knowledge in the literature on identifying the roles of the PMO in agile environments. Especially on providing theoretical explanations on how a firm transition to agile impacts these roles. This gap is discussed later in section 1.1. To address it, this thesis focusses on the role and responsibilities of the PMO on firms who have implemented agile methods in their IT organization within more than ten teams (Dingsøyr et al., 2014). In the cases this thesis explores, the core business is not software development. However, the IT organization is critical.

This study conducted an exploratory research approach to answer the main research question. It pursued descriptive qualitative research with a grounded theory overtone using semi-structured interviews and surveys with nine professionals in four large firms (Corbin & Strauss, 2015; Sandelowski, 2000). This thesis did not reach a hypothesis formulation. Its contribution to science is twofold. First, it proposes a taxonomy framework that contributes to the description of the PMO, enriching the field towards a unified theory of project management. Second, it provides empirical evidence for the change in roles of the PMO with the introduction of agile.

This study found that there are wide disparities between the roles of the PMOs in different organizations. It also found that PMO performs different functions before and after the introduction of agile methods in a firm. It seems to be consistent that the PMOs are involved in the activities of monitoring, controlling, and standardizing project methodologies in both periods. A common theme across the participants' reports is that the PMOs participation got diminished or repurposed to a supporting and serving role with the introduction of agile. An explanation for this change is the shared responsibility the PMOs have with the agile teams on processes they were the sole or main responsible in traditional settings. Another common theme is the interfacing part the PMO plays, bridging traditional sectors and agile sectors of the firm. Participants in all firms believe the current state of the PMO is not final and expect it to continue to change.

Although enlightening, this study cannot claim statistical significance in these results. The sample is too small to be representative of the universe of PMOs in firms that have agile teams. The study observed similarities between cases, but also just as many distinctions. The common themes are sparsely present within a wide range of dissonant accounts. This study argues that the PMO is a context-specific entity but falls short from proposing a hypothesis that could explain the similarities and differences observed.

The remainder of this chapter is organized as follows. The following section briefly presents the contextual background to this research. Section 1.2 articulates the research question based on the identified gap of knowledge. Section 1.3 details the research approach adopted in this study. Section 1.4 introduces the object of study. Section 1.5 links this study to the overarching MSc program. Finally, 1.6 offers a reading guide to this document.

1.1 Contextual background

1.1.1 Traditional Project Management

Traditional, or "waterfall" project management are names given to plan-driven management systems of project organizations (<u>Conforto et al., 2014; Kulak & Li, 2017; Lavoie-Tremblay et al., 2012; Stettina & Schoemaker, 2018; Thiry & Deguire, 2007</u>). PRINCE2 (<u>AXELOS, 2017</u>) or the PMBOK®(<u>Project Management Institute, 2019</u>) and ISO 21500 (<u>ISO, 2012</u>) are examples of traditional project management standards.

Traditional project management is usually associated with "hard" systems thinking (<u>Karrbom</u> <u>Gustavsson & Hallin, 2014</u>). Traditional methodologies try to optimize resource allocation in projects and employ command and control systems to manage scope, costs, and delivery times (<u>Boehm, 1988</u>). It several risk management techniques such as go/kill gate processes where decisions are made based on a pre-committed set of project requirements and the relevance of the investment for the business (<u>Cooper, 2016</u>). A project-based organization can grow to a complex environment with several interdependent projects and actors. As the number and complexity of projects grow, the need and use of a PMO emerges (<u>Aubry, Müller, Hobbs, & Blomquist, 2010</u>; <u>Desouza & Evaristo, 2006</u>).

1.1.2 The PMO

The PMO is an emblematic figure of traditional project management (Lines & Ambler, 2012) because of its widespread adoption of PMO in project-based organizations (Thiry & Deguire, 2007). As a result of its association with increased success rates of projects, reduced overall costs, and delivery time in plan-driven, stage-gate project-based structures(Dai & Wells, 2004; Salameh, 2014).

However, the PMO is an ambiguous and diverse construct, as Chapter 2 discusses in detail. There are several and sometimes ambiguous definitions of the acronym. As <u>Giraudo and Monaldi (2015)</u> put it, there is no "one size fits all definition of the PMO." The Project Management Institute (PMI) defines the PMO as: "A management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques" (<u>Project Management Institute, 2017, p. 40</u>).

In practice, PMO is a hypernym that can stand for program, project, or portfolio management office. The first two can have several purposes, among them foster standardized project management practices through thoroughly curating data of past projects (Thiry & Deguire, 2007). The latter is usually related to the management of risk and alignment of the project portfolio with the strategic business goals (Stettina & Hörz, 2015). There is little evidence to support any difference between the titles other than their aggregation level, and authors often overlook their distinction (Aubry, Hobbs, & Thuillier, 2008). Other names for the PMO include supporting office, center of excellence, and project office (Hobbs & Aubry, 2007).

Furthermore, PMOs in different organizations hold little similarities with each other. Some organizations implement more than one PMO with different mandates, and the PMO across organizations seems to adapt to the idiosyncrasies of its environment (<u>Müller et al., 2013</u>). The wide variety of PMO configurations can be explained by a pursuit of cost efficiency, as sometimes firms see PMOs as an overhead cost to projects, and tend to allocate more functions to them (<u>Hobbs & Aubry, 2007</u>). Reducing overhead to project development is at the core of agile project management. Some authors propose definitions for the PMO within an Agile context (<u>Giraudo & Monaldi, 2015; Power, 2011</u>), which Chapter 2 discusses in detail. However, there are few publications on the topic.

1.1.3 Agile Project Management

The Agile Manifesto (<u>Beck et al., 2001</u>) describes agile as a set of values and principles that aim to improve software development. Businesses who have adopted agile report benefits, including the reduction of project risk, lower time-to-market, better team morale (<u>VersionOne, 2019</u>).

Agile is not a standard. Authors describe agile as a framework (<u>Kalenda, Hyna, & Rossi, 2018</u>), as a mindset (<u>Denning, 2013</u>), and as a philosophy (<u>Hooper Mark, 2001</u>). Although standards exist, agile methodologies are loosely defined, Chapter 2 discusses this further. As a result, the term agile serves as an umbrella for a wide range of methods (i.e., Scrum, Lean, Extreme Programming) (<u>Abrahamsson, Warsta, Siponen, & Ronkainen, 2003</u>; <u>Chow & Cao, 2008</u>; <u>Meyer, 2014</u>).

Agile and traditional project management methodologies have fundamental differences in the way projects are planned and executed. Traditional project management is usually associated with "hard" systems thinking in counterpart to agile, further in the "soft" side of the spectrum (Karrbom Gustavsson & Hallin, 2014).

Agile argues that overhead costs, requirements elicitation, and planning processes result in overspending and delaying innovative product development (<u>Dybå & Dingsøyr, 2008</u>; <u>Meyer, 2014</u>). Agile assumes that there are too many uncertainties on the development path for steps like requirement elicitation and

lifecycle planning to have any positive impact (Meyer, 2014; T. Williams, 2005). These differences conflict with previously established roles, functions, and, more problematically, the people that perform them. In this sense, the introduction of agile ways of working is a disruption of traditional practices in the organization (Aubry, Hobbs, et al., 2010).

The change to agile methods has effects of various aspects of a firm's organizational structure, including the PMO. Agile standards have different approaches to the use of a PMO. As an example, DAD states that it is an obsolete institution (<u>Amber, 2013</u>), while SAFe incorporates it as part of its portfolio management structure (<u>Scaled Agile Inc, 2018c</u>).

More recently, hybrid implementations, that mix aspects from traditional and agile methods, are increasingly more popular. The PMI institute report that 23% of the 2018 respondents employ a hybrid, compared to 30% claiming to use agile (<u>Project Management Institute, 2018</u>).

It is not rare to find PMOs in firms that use pure or hybrid agile methods. In a preliminary investigation, the author observed that there often are PMOs in agile environments¹. However, it is not clear whether the PMOs in these cases have similar roles and responsibilities as the PMO in traditional methodologies. On the impacts of agile on the roles of the PMO, <u>Hodgkins and Hohmann (2007)</u> indicate that there is no change in the scope when compared to traditional methodologies, but a few tasks become more important. <u>Ferreira, Viegas, and Trento (2018)</u>. describe a shift from measuring progress and enforcing standards day-to-day routine to an integration, facilitation of communication between groups, and transparency enforcing routines.

1.1.4 Research gap

Project management is a mechanism to cope with the complexity of project development (<u>Aritua, Smith,</u> <u>& Bower, 2009</u>). Traditional methodologies employ systems of command and control to manage this complexity, often using the figure of the PMO for governance and standardization of project management practices (<u>Artto, Kulvik, Poskela, & Turkulainen, 2011</u>; <u>Müller et al., 2013</u>).

Although firms also use PMOs within agile contexts, their role in these settings is not often explored. Authors investigate how the PMO can aid the transition to agile (<u>Hodgkins & Hohmann, 2007</u>), how the PMO should be in an agile environment (<u>Elatta, 2012</u>; <u>Pinto & Ribeiro, 2018</u>) and experience reports of establishing PMOs (<u>Tengshe & Noble, 2007</u>). Literature and standards provide little indication of whether the roles and responsibilities resemble the ones they have in traditional methodologies

There is no consensus in the literature on what entails a PMO resulting in a wide variety of structures classified as PMO. The vast amount of PMO descriptions and definitions with overlapping and contradicting concepts illustrates that there is no widely accepted taxonomy to describe the PMO. The disparity of descriptions is common to traditional and agile contexts. The PMO is an ambiguous construct that integrates project-based organizations for multiple context-specific reasons. Despite all the publications attempting to model the PMO, it remains an ambiguous figure in the firm. There seem to be several gaps in the literature concerning the PMO. Among them, the ways a firm's introduction of agile to a large number of teams impacts the role of the PMO.

¹ This fact was observed through a consultation with Agile Coaches on the Agile projects they had participated. Out of 14 large cases 2 didn't have a PMO. See 0.

1.2 Research Question

This study proposed to explore the role of the PMO before and after the introduction of agile to address the research gap. Assuming that observing the two periods can give insights on the impacts of the introduction of agile. Therefore, the proposed question to bridge this gap is:

"How do the roles of Project/Program/Portfolio Management Offices change with the introduction of Agile methodologies to a large number of teams?"

To orient the exploratory study of this topic, this thesis breaks the main research question into five subquestions. The following section describes each of them in further detail, presenting the methodology proposed and its limitations.

- 1 How does literature describe the PMO in traditional and agile approaches?
- 2 How do traditional and Agile standards describe the PMO?
- 3 How is the role of the PMO conducted in practice in organizations that have implemented Agile methodologies?
- 4 How is the de facto role of the PMO in organizations which have implemented Agile methodologies different from their past role under traditional methodologies?
- 5 What patterns emerge from the change in the PMO's roles and their organizational context?

1.3 Research Approach

This study conducted descriptive exploratory research (<u>Corbin & Strauss, 2015</u>; <u>Sandelowski, 2000</u>) to answer the main research question. It used a qualitative method complemented by a quantitative method. This choice of approach is beneficial for two reasons. First, the lack of research on the role of the PMO, especially providing theoretical explanations on the relationship with traditional and agile project management methodologies, indicates that there is a deficiency of a fundamental layer of the scientific process, the facts. In this early maturity stage of research, a naturalistic inquiry without a specific hypothesis or proposition can yield valuable knowledge about the phenomenon (<u>Neergaard, Olesen, Andersen, & Sondergaard, 2009</u>; <u>Sandelowski, 2000</u>).

Second, the description of roles is subjective and abstract. A strictly quantitative approach would risk losing relevant nuances and information that can help to understand the phenomenon. As the topic is extensive, the quantitative method helped guide the analytical process and systematic data collection. This study collected and explored empirical data from nine professionals from four different firms.

Section 1.2 splits the main research question into five sub-questions that guide and support this study. This section discusses the specific methods conducted throughout the research chosen to solve the proposed questions, and addresses the limitations to the proposed approach.

1.3.1 RQ1 - How does literature describe the PMO in traditional and agile approaches?

The objective of this question is to understand how the role of the PMO is discussed in literature across the different methodologies in both traditional and Agile paradigms. This study conducted a systematic literature research on peer-reviewed publications on the PMO's role and activities to achieve this objective. The research contemplates both traditional and agile methodologies and assesses whether there is fundamental empirical distinction or overlap. The research used the Scopus platform for selecting the publication.

1.3.2 RQ2 - How do traditional and Agile standards describe the PMO?

The goal of this question is to understand how the PMO is supposed to work according to Agile standards. To this end, this study consulted the most prominent standards available on both traditional methods and Agile methods. The focus while exploring these documents was to identify how and to which scope each describes the PMO.

1.3.3 RQ3 - How is the role of the PMO conducted in practice in organizations that have implemented Agile methodologies?

The objective of this question is to identify the role of PMO's and how do they operate in practice. Therefore, this research conducted multiple case studies and cross-case analysis. The case studies used a semi-structured interview design. The answers for sub-questions 1 and 2 produce a detailed description of the PMO, which was used to derive the interview protocol. From the base protocol, this study invited professionals from multiple companies and conducted a series of semi-structured interviews with the ones who accepted and fitted the selection criteria. The selection took into account the characteristics of the organization the participant was involved with, the capacity in which they participate in these organizations, their time in service, and their level of involvement in strategic decisions. The interviews were recorded, transcribed, and coded for analysis (Corbin & Strauss, 2015; Yin, 2018). The protocol serves the purpose of guaranteeing comparability between the results and cross-validation. However, the semi-structured method serves the purpose of the exploratory research and enriching the initial scope with more nuances and unforeseen patterns.

1.3.4 RQ4 - How is the de facto role of the PMO in organizations which have implemented Agile methodologies different from their past role under traditional methodologies?

The objective of this question is to understand whether and how the new role of the PMO different from the one it had before the Agile adoption. The study used the information gathered on research question 3 and other insights captured in the interviews to compare both periods in the firm's history. The semistructured interviews of question 3 included organizations that have transitioned to Agile and the professionals interviewed must be able to discuss the period before the adoption as well

1.3.5 RQ5 - What patterns emerge from the change in the PMO's roles and their organizational context?

The objective of this question is to identify if there are emerging patterns on the interviews' results that can help to understand the role of PMOs on Agile. The study conducted a cross-case analysis. This process resulted in a synthesis of the research and wrapped up the answer to the main research question.

1.3.6 Limitations and challenges to the research validity

The proposed approach addresses the problem of validity by carefully considering mitigation strategies for the limitations of each method. Even so, there are some potential limitations to the research design, namely: an organization can be under multiple simultaneous change processes at any given time. Either formally established or not, it is probable that the transition towards agile is not the only transformation happening at the company. Trying to isolate the effects of the agile transition may not be possible, and the conclusions of the study may have influences from hidden factors not foreseen by the adopted framework. A strategy to cope with this risk is to incorporate in the semi-structured interview questionnaire inquiries on the changing landscape of the company. Along with it, too significant discrepancies between interviews can indicate the influence of other organizational changes. Some cases rely on the memory the interviewees have of the period they have participated in them. There are several considerations to be made. As the years pass the composition of teams' changes, the present staff may not have participated throughout the transition period. In fact, in technology departments, this is more of the norm than the exception (Johnson, 2018). The personnel, whose participation span for more extended periods is often far from this research's scope of the study.

Further, there are privacy issues involved. The consultants involved in each case are often required to keep all data, documents, and information on the company with the company. Their capacity to share experiences is limited both by the reach of memory and contractual obligations.

1.4 Object of study

The object of study of this research is the PMO involved in a firm's transition to Agile. Using the taxonomy presented in the <u>Project Management Institute (2013)</u>, in this thesis, this role is viewed to be classified as a type 3 or 4 PMO (see 2.3.1). The case studies considered in this study are mainly from financial institutions.

1.5 The relevance of the subject to the master studies

The proposed topic is aligned with the Complex Systems Engineering and Management program objectives because it discusses the effects of changes within complex socio-technical systems. The socio-technical system under study is the project-based organization (PBO). A PBO has a collection of rules in place to coordinate project development. These set of rules are called project management practices and have the purpose of coping with the complexity of project development (Sohi, Hertogh, Bosch-Rekveldt, & Blom, 2016). Complexity in project management grows with the number of interdependencies between agents there are in the system (Davies & Mackenzie, 2014; T. M. Williams, 1999).

The change in the PBO is the adoption of agile methodologies to replace traditional project management techniques. <u>Meso and Jain (2006)</u> relate the principles of agile to those of complex adaptative systems (CAS), arguing that agile embraces the complexity of project development instead of attempting to control it, making firms that adopt agile better prepared to respond to changes in their environment.

The study chose to observe the effects of the change on the PMO, due to its widespread presence across firms and close ties with traditional project management methods. The study makes use of qualitative and quantitative methods, as described in 1.3, 2.1, and 3.1. For the factors exposed, the research is suitable for the objectives of the Complex Systems Engineering and Management master's degree program of TU Delft.

1.6 Thesis Structure

The remainder of this document reads as follows. Chapter 2 presents the literature review of this research, and it covers sub-questions 1 and 2. It serves as a base for the development of the interview protocol as well as the following interpretations. Chapter 3 presents the process used to collect data and describes the cases analyzed. Chapter 4 presents the results of the research answering questions 3, 4, and 5. Chapter 5 positions this study within the overarching scientific literature. Chapter 6 presents conclusions, along with recommendations for future explorations.

2 The multiple views on the PMO

Defining the PMO is no easy task, and even though there has been considerable effort carried by several different authors(<u>Project Management Institute</u>, 2013), there is not a unified taxonomy to date. Just as there is no singular description of the responsibilities of a PMO and the activities it performs (<u>Desouza & Evaristo</u>, 2006). This chapter presents the current status of research on the PMO. It covers sub-questions 1 and 2. Section 2.2 aims to answer "How does literature describe the PMO in traditional and agile approaches?". While Section 2.3 aims to answer "How do traditional and Agile standards describe the PMO?". This research did so by conducting a literature review, as described in Section 2.1.

The literature study found 36 functions usually associated with the PMO, and four basic roles PMOs (coordinating, controlling, supporting, serving) assume when performing tasks associated with those functions. The literature is vague when describing factors that could make role transitions explicit. However, there is some indication of the outcomes of the transition. For instance, a shift from controlling to supporting and coordinating seems to be a common theme both in academic and trade literature (<u>Pinto & Ribeiro, 2018; Power, 2011</u>).

The chapter reads as follows: Section 2.1 describes the methodology of the literature review conducted, while sections 2.2 and 2.3 present the results from this effort answering the mentioned sub-questions. Section 2.4 offers a preliminary conclusion and presents the taxonomy framework used in this study.

2.1 Methodology

For the academic literature review in the first part of this chapter, the study used the Scopus Platform and obtained a significant amount of results. The search contemplated peer-reviewed publications, and the query TITLE-ABS-KEY (PMO OR "Project Management Office" OR "Program Management Office" OR "Portfolio Management Office") yielded 3432 documents. The full queries can be found in Appendix A. The choice for the Scopus platform as the search engine is due to its more extensive pool of results, as shown in Table 1.

Database	Number of results
Scopus	3432
Google Scholar	1930
World Cat	2630

Table 1 - Database results comparison

The list was filtered to eliminate the usage of the acronym in other subject areas (E.g., Medicine, Biology, Chemistry). The list was further filtered based on their titles and abstracts reaching 131 articles and conference papers. Finally, the results were narrowed down to 21 upon reading, out of which seven mentions agile. Table 2 lists the publications consulted. This work recurred to the recommendations from the supervisors, the snowballing technique, and trade publications for context.

The second part answers the second research sub-question, where this study searched the standards behind the principal large-scale agile methodologies as well as the leading traditional standards. The traditional standards investigated were the PMBoK, PRINCE2, and ISO21500:2012. The study explored the agile standards described in the report State of Agile (VersionOne, 2019). The report is the oldest recurring survey on industries' agile practices. This 13th annual edition collected data from over a thousand full responses from different organizations.

Table 2 - Summary of literature review

Group	ID	Source	Topic	Data	Data collection	Method	Results
General	1	Desouza and Evaristo (2006)	Knowledge archetypes of the PMO.	Primary	Semi-structured interview	Exploratory narrative	Defined Administrative and Knowledge- intensive archetypes of PMOs.
	2	2 <u>Artto et al.</u> Types of control (2011) mechanisms used to manage projects.			Semi-structured interview and literature review	Exploratory narrative	The tendency of migrating from a boundary and diagnostic control systems to belief and integrative. Relationship between control systems and strategy.
	3	Hobbs and Aubry (2007)	The relation between the functions of the PMO and project success.	Primary	Survey	Factor analysis	Listed and grouped by association the functions of the PMO.
	4	<u>Giraudo and</u> <u>Monaldi (2015)</u>	History of the PMO.	Secondary	Literature Study	Exploratory narrative	The PMOs change with technological and social advancements.
	5	Bredillet, Tywoniak, and Tootoonchy (2018a)	Co-evolution of the PMO and portfolio management.	Primary	Interviews, case study observations, and documentation.	Content analysis	Validate that the PMO has an ongoing transformative nature. Propose that equilibrium explains better the relationship between PMOs and portfolio management.
	6	Bredillet, Tywoniak, and Tootoonchy (2018b)	Drivers of the PMO changes.		Multiple case studies (Interviews, case study observations, and documentation.)	Structural Analysis.	Validate the dynamic stability of the PMO and portfolio management. Validate that changes in the organizational context trigger changes in routines and roles of PMO and portfolio management.
	7	<u>Salameh (2014)</u>	Best practices on establishing a PMO	Secondary	Literature review	Narrative	A framework for establishing a PMO

Group	ID	Source	Topic	Data	Data collection	Method	Results
	8	Aubry, Hobbs, and Thuillier (2007)	Organizational project management	Secondary	Literature review	Narrative	A conceptual framework linking organizational theory, innovation theory and sociology to study the PMO and organizational project management
	9	Pellegrinelli and Garagna (2009)	PMO changes	Primary	Participatory inquiry with attendants in a forum	Narrative	Conceptualization of PMOs an agent and subject of change. Introduction of the idea that the PMO exists to solve a problem, and once solved, it becomes redundant.
	10	Dai and Wells Effects of PMO in project performance			Two surveys (7-point Likert- scale): random sample and selected population	Statistical analysis	A high correlation between project management standards with project performance.
	11	Aubry and Hobbs (2011)	Contribution of Project Management to Organizational Performance	Primary	Multiple case studies: interviews + questionnaires (5-point Likert- scale)	Narrative	Conceptualizes the PMO as the center of different aspects of organizational performance.
	12	Andersen, Henriksen, and Aarseth (2007)	Best practices on establishing a PMO	Primary	Two sets of interviews: The first with large companies integrating the research consortia, the second with large global companies for benchmarking.	Narrative.	A framework for establishing a PMO
	13	<u>Müller et al.</u> (2013)	Roles of the PMO	Primary	Multiple case studies (Cross case study analysis.	The role profile of the PMO is dependent on the counterpart of the interaction. Evidence that the controlling role of the PMO is the most common and lack of knowledge sharing mechanisms is a characteristic of this role.
	14	Aubry, Müller, et al. (2010)	PMO change.	Primary	Multiple case studies (interviews)	Qualitative text analysis.	Derived three patterns of change of the PMO.

Group	ID	Source	Topic	Data	Data collection	Method	Results
	15	<u>Unger,</u> <u>Gemünden, and</u> Aubry (2012)	Effects of PMO in project performance	Primary	Survey (7-point Likert scale)	Exploratory factor	First quantitative empirical evidence of the impact of the PMO roles in project performance.
						analysis, regression analysis.	
Agile	16	Tengshe and Noble (2007)	Experience report on establishing a PMO	Primary	Observation		The experience of the PMO can be used to improve the experience of transitioning to agile methods.
	17	Scotland and Boutin (2008)	Experience report on adopting Scrum	Primary	Observation		The experience of the PMO can be used to improve the experience of transitioning to agile methods.
	18	Hodgkins and Hohmann (2007)	Experience report on implementing agile methods.	Primary	Observation		The PMO is fundamental for the adoption of agile methods in multi-product portfolios.
	19	<u>Power (2011)</u>	Experience report on implementing agile methods.	Primary	Observation		The PMO is a link between departments of the firm that run traditional and agile methods.
	20	Pinto and Ribeiro (2018)	Characterization of a PMO in an organizational environment that uses agile methods.	Secondary	Literature review	Narrative	The changes in the PMO are not in the activities they perform but rather in the way PMOs conduct these activities.
	21	Kulak and Li (2017)	Enterprise agility	Secondary	Literature review	Narrative	The book discusses the complications of scaling agile and how the demise is self-inflicted by the teams.

2.2 The literature on the PMO

The landscape of academic literature on the PMO concentrates mostly on exploratory research. Its scope is diverse in several aspects, with some addressing the task profile of PMO activities, some addressing its functions, some addressing its roles in an organization, and some attempting to devise types of PMOs. The aim studies take also varies between studies that attempt to make sense of PMO transformations, studies that attempt to model or propose ideal PMO models, and studies that evaluate current designs and their impact on project performance. Table 3 provides an overview of the distribution of the analyzed studies. The studies mentioned propose their definition of PMO characteristics or build upon other author's definitions. It is worth mentioning that many authors use the definitions of professional sources or refer to other author's proposals (Lavoie-Tremblay et al., 2012; Too & Weaver, 2014). This review did not include these studies.

Research objects	Source
Models the PMO	Desouza and Evaristo (2006)
	<u>Artto et al. (2011)</u>
	Hobbs and Aubry (2007)
	Giraudo and Monaldi (2015)
	Bredillet et al. (2018a)
	Bredillet et al. (2018b)
	<u>Salameh (2014)</u>
	<u>Müller et al. (2013)</u>
Investigate the PMO transformation	<u>Aubry et al. (2007)</u>
	Pellegrinelli and Garagna (2009)
	Aubry, Müller, et al. (2010)
Relate the PMO with performance	Dai and Wells (2004)
	Aubry and Hobbs (2011)
	Hobbs and Aubry (2007)
	<u>Unger et al. (2012)</u>
PMO Best Practices	Andersen et al. (2007)

Table 3 - Distribution of Academic Literature on the PMO

2.2.1 The roles of the PMO

The definition of the role is broad and somewhat overlapping with that of functions. In psychology, "role" is defined as a set of behaviors, rights, responsibilities, beliefs, and norms an actor expresses or is expected to abide in a social situation (<u>Biddle, 1986</u>). However, "role" can also be defined as "the function that somebody has something has or the part somebody/something plays in a particular

situation" (Oxford Learner's Dictionary, 2019) Aubry and Hobbs (2011) use the functional approach for roles. The present study divides both terms by a level of abstraction: functions are closer to operational tasks than the roles presented above.

Perhaps the best way to understand the role of an agent is to dive into the field where the term originates: stories. A character has a role in a story. That role is a leading role if the character is the primary driver or subject of the events narrated in the story; the character in this role is often called the main character. In counterpart, the role is a supporting role if the character's actions and interactions with the world have consequences shaping the main character's development, either directly or indirectly. The more complex the story is, the harder it is to identify leading and supporting roles. Characters alternate between leading and supporting roles throughout the story.

A parallel is valid for the PMO in a firm. The PMO is often an entity outside the largest divisions of the firm while maintaining interface with many different actors within and outside a firm (<u>Müller et al.</u>, 2013). As a result, the PMO assumes multiple roles in a company, and these roles vary considerably across businesses (<u>Aubry & Hobbs, 2011</u>; <u>Hobbs & Aubry, 2007</u>; <u>Müller et al., 2013</u>). The most common types of PMO roles in literature are coordinating, supporting, and controlling.

The **coordinating role** is more likely to be present in PMOs that manage multiple projects, a or some programs, and a portfolio (<u>Too & Weaver, 2014</u>). It is the role assumed by the PMO when conducting resource management functions and mediating stakeholders (<u>Unger et al., 2012</u>). Associated with this role are functions like resource allocation and mediating conflict.

The **controlling role** is associated with the traditional command and control style of management (<u>Nerur, Mahapatra, & Mangalaraj, 2005</u>). PMOs assume this role when enforcing project management standards, guaranteeing projects' compliance with internal and external regulations, and evaluating project performance. In this role, the PMO contributes to increasing transparency and establishing an information system (<u>Müller et al., 2013</u>; <u>Unger et al., 2012</u>).

The **supporting role** is the role the PMO takes when it facilitates knowledge transferring between projects and teams and develops and maintains project management standards, for instance (<u>Unger et al., 2012</u>).

The **serving role** is the role the PMO takes when it provides services to other units. Be it by conducting training, consulting, and administrative functions or specialized tasks. (<u>Müller et al., 2013</u>)

<u>Artto et al. (2011)</u> define a fifth role of the PMO based on their discussion on control systems: the integrative role. The authors define four types of control mechanisms:

- **Boundary Systems** exert control through standardization and planning, limiting ways of working to pre-established agreements;
- **Diagnostic Control Systems** relate to the most classic management approach of budget control, resource allocation, and performance measurement;
- **Belief Systems** direct portfolios, programs or projects through collective values and principles expressed in shared mission and vision;
- Interactive Control Systems is a direct and personal influence of managers on the personnel conducts tasks, done by frequent interactions formal or informal.

Their study suggests that PMOs will benefit from migrating to a composition of control systems based on Belief systems and Interactive control systems. The role PMO would assume in this case is the integrative role, where PMOs engage in personal interactions with actors in the firm to nudge them into alignment with the firm's mission and vision. The authors, however, did not observe any institution behaving in such a manner. Instead, they showed that PMOs tend to exert their scope through formal control systems most of the time. They justify that, in time, the PMOs will transition to such a role, but their cases included either recently established PMOs or interviewees with little experience.

<u>Müller et al. (2013)</u> describe a Partnering role as "[the] PMO takes on a partnering role when it engages in equal knowledge sharing, exchange of expertise, lateral advice-giving, and joint learning with equal level stakeholders" (<u>Müller et al., 2013, p. 61</u>). The authors acknowledge the lack of coverage of this role in overall research. However, the proposed description resembles the serving and supporting roles mentioned above.

Apart from roles and control systems, <u>Desouza and Evaristo (2006)</u> propose that the PMO may be involved in any set of the following tasks: project knowledge management, project process, and procedures, training, resource management, portfolio management, financial management. They also denote that the manner the PMOs are involved depends on their level: strategic, tactical, and operational. In their definition, the level describes the goal of the PMO and describes which set of tasks the PMO executes. The authors derive their knowledge archetypes based on a dual classification system: administrative and knowledge-intensive.

A full picture of the roles of the PMO is, therefore, subject to different dimensions. The role of the PMO is dependent on its levels of scope (strategic, tactical and operational) (Desouza & Evaristo, 2006), its functions (Hobbs & Aubry, 2007), its relationships with other units (Aubry & Hobbs, 2011; Aubry et al., 2007; Thiry & Deguire, 2007), its types of control mechanisms (Artto et al., 2011) and the nature of its tasks (Desouza & Evaristo, 2006). The combination of these factors results in a wide variety of PMOs observed. Aubry et al. (2007) suggest that the internal link between the different compositions is the primal nature of the PMOs' contribution to an organization. That of constant checks and balances pairing stakeholders competing for values with projects, programs, and portfolio management.

The authors <u>Thiry and Deguire (2007)</u> argue that a successful project-based organization is vertically integrated through competent portfolio management and horizontally integrated through program management. In their framework, the PMO stands for program management office has the role of bridging Leadership and policies into processes and procedures. Much like the organizational model proposed by

Authors describe the PMO with a diverse set of terms that seem to be useful to the context of their publications. <u>Hobbs and Aubry (2007, p. 85)</u> observe that" organizations establish a great variety of different PMOs to deal with their reality." The authors also mention that the PMO is short-lived in most of the companies evaluated in the study, with an average age of 2 years before dismantling or transformation. Defining the PMO as a context and time-specific construct explains why the effort of researching yields many different naming approaches. Research may be equally constrained to these dimensions.

2.2.2 The functions of the PMO

Functions are an essential part of the PMO roles and extensively covered in the literature. The publications are divided into prescriptive recommendations for the PMO's behavior (Duggal, 2011) and analysis of the observed behavior of PMOs. The outcoming functions of both kinds encompass different fields of expertise. <u>Hobbs and Aubry (2007)</u> present the most comprehensive list of functions. The authors identify 27 functions a PMO perform in their survey with 500 respondents. Through a factorial analysis, the authors group the functions in five groups, namely:

- 1. **Monitoring and Controlling project performance** this group involves reporting to upper management, defining performance criteria, monitoring and controlling performance, and managing the project's information system.
- 2. Development of Project Management Competencies and Methodologies this group relates to training, mentoring, and coaching of project management professionals, defining project standards, and spreading the firms' project management culture.
- 3. **Multi-Project Management** this group relates to the management of the firm's portfolio, and it includes the allocation of resources among projects prioritizing the strategic business goals and orchestrating interdependencies between projects and programs.
- 4. **Strategic Management** this group includes advising upper management, participating in strategic planning, and stakeholder management.
- 5. **Organizational Learning** this group deals with performance monitoring and control, project documentation, assessment, audition, and cataloging.

Table 4 summarizes the potential functions listed by <u>Hobbs and Aubry (2007)</u> and with the addition of contributions from other authors. The degree of responsibility the PMO has over each function varies from organization to organization. Not only this table illustrates the extension of the topic, but it is a starting point for the analysis of this research. The table is later used to map the functions of the PMOs in the case studies.

Group	Id	Function	Source
Monitoring and	1	Report project status to upper management	(Hobbs &
Controlling Project			Aubry, 2007)
Performance	2	Monitoring and control of project performance	(Bredillet et al.,
			<u>2018a, 2018b;</u>
			Hobbs & Aubry,
			<u>2007;</u>
			Pellegrinelli &
			<u>Garagna, 2009;</u>
			Salameh, 2014;
			<u>Thiry &</u>
			<u>Deguire, 2007</u>)
	3	Implement and operate a project information	(Bredillet et al.,
		system	<u>2018a; Hobbs &</u>
			<u>Aubry, 2007;</u>
			<u>Kerzner, 2003</u>)
	4	Develop and maintain a project scoreboard.	(<u>Hobbs &</u>
			<u>Aubry, 2007</u>)
Development of	5	Develop and implement a standard	(<u>Andersen et al.,</u>
Project Management		methodology	<u>2007; Bredillet</u>
Competencies and			<u>et al., 2018a</u> ,
Methodologies			<u>2018b; Dai &</u>
			<u>Wells, 2004;</u>
			Hobbs & Aubry,
			<u>2007; Kerzner,</u>
			<u>2003;</u>
			Pellegrinelli &
			<u>Garagna, 2009;</u>
			<u>Salameh, 2014;</u>
			Thiry &
			<u>Deguire, 2007</u>)

Table 4 - PMO functions (adapted from Hobbs and Aubry (2007, p. 82))

Group	Id	Function	Source
	6	Promote project management within the organization	(Bredillet et al., 2018a, 2018b; Hobbs & Aubry, 2007; Power, 2011)
	7	Develop competency of personnel, including training	(<u>Andersen et al.,</u> <u>2007; Dai &</u> <u>Wells, 2004;</u> <u>Hobbs & Aubry,</u> <u>2007; Kerzner,</u> <u>2003</u>)
	8	Provide mentoring for project managers	(Dai & Wells, 2004; Hobbs & Aubry, 2007; Kerzner, 2003; Pellegrinelli & Garagna, 2009)
	9	Provide a set of tools without an effort to standardize.	(<u>Hobbs &</u> <u>Aubry, 2007;</u> <u>Pellegrinelli &</u> <u>Garagna, 2009</u>)
Multi-Project Management	10	Coordinate between projects	(<u>Hobbs &</u> Aubry, 2007)
	11	Identify, select, and prioritize new projects	(Hobbs & Aubry, 2007; Pellegrinelli & Garagna, 2009)
	12	Manage one or more portfolios	(<u>Hobbs &</u> <u>Aubry, 2007;</u> Salameh, 2014)
	13	Manage one or more programs	(<u>Hobbs &</u> Aubry, 2007)
	14	Allocate resources between projects.	(Bredillet et al., 2018b; Dai & Wells, 2004; Hobbs & Aubry, 2007; Kerzner, 2003; Pellegrinelli & Garagna, 2009; Salameh, 2014; Thiry & Deguire, 2007)
Strategic Management	15	Provide advice to upper management	(<u>Andersen et al.,</u> <u>2007; Hobbs &</u> <u>Aubry, 2007</u>)
	16	Participate in strategic planning	(<u>Hobbs &</u> <u>Aubry, 2007;</u> Salameh, 2014)
	17	Benefits management	(<u>Hobbs &</u> <u>Aubry, 2007</u>)

Group	Id	Function	Source
	18	Network and provide environmental scanning.	(<u>Hobbs &</u>
			<u>Aubry, 2007</u>)
	19	Monitor and control the performance of the	(Artto et al.,
		РМО	<u>2011; Hobbs &</u>
			<u>Aubry, 2007</u>)
	20	Manage archives of project documentation	(Bredillet et al.,
			<u>2018a, 2018b;</u>
			Dai & Wells,
			<u>2004; Hobbs &</u>
			<u>Aubry, 2007;</u>
			Kerzner, 2003)
	21	Conduct post-project reviews	(Hobbs &
			<u>Aubry, 2007</u>)
	22	Conduct project audits	(<u>Hobbs &</u>
			<u>Aubry, 2007</u>)
	23	Implement and manage a database of lessons	(<u>Hobbs &</u>
		learned	<u>Aubry, 2007</u>)
Other	24	Implement and manage a risk database.	(<u>Hobbs &</u>
			<u>Aubry, 2007</u>)
	25	Execute Specialized Tasks for Project	(Andersen et al.,
		Managers	<u>2007; Hobbs &</u>
			<u>Aubry, 2007</u>)
	26	Manage customer interfaces	(Hobbs &
			<u>Aubry, 2007</u>)
	27	Recruit, Select, Evaluate, and Determine	(<u>Hobbs &</u>
		Salaries for Project Managers	Aubry, 2007)
Not Listed in <u>Hobbs</u>	28	Project administrative support	(Andersen et al.,
<u>and Aubry (2007)</u>			<u>2007; Artto et</u>
			<u>al., 2011; Dai &</u>
			<u>Wells, 2004;</u>
			Pellegrinelli &
			<u>Garagna, 2009;</u>
	20	W. 1. C	Salameh, 2014)
	29	Work-family equilibrium	(<u>Aubry, Hobbs</u> ,
	20	Dereste in the strength of the	<u>et al., 2010</u>)
	30	Developing the change management database	(Bredillet et al.,
			2018b; <u>Salameh</u> , 2014)
	31	Portfolio problem solving	(Bredillet et al.,
	51	romono problem sorving	(<u>Bredifiet et al.</u> , 2018b)
	32	Cost/benefit analysis of projects	(Kerzner, 2003;
	52	cost benefit analysis of projects	Pellegrinelli &
			Garagna, 2009)
	33	Risk management	(Artto et al.,
	55	Nisk management	<u>2011;</u>
			Pellegrinelli &
			Garagna, 2009)
	34	Project/program delivery management	(Desouza &
			Evaristo, 2006;
			<u>Salameh, 2014</u>)
	35	Project management benchmarking	(Kerzner, 2003)
	36	Managing stakeholders	(Kerzner, 2003)
	50		(<u>ICCIZIICI, 2005</u>)

The table shows that a fair share of the functions observed by Hobbs and Aubry has support in the publications of other authors. Even though their study had access to a large pool of respondents, other authors have documented functions not contemplated in their list. There are at least two challenges in listing the function of a construct, such as the PMO. First, there is no way of knowing how large is the population of PMOs; as a result, there is no assurance that the list of Table 4 is complete. It is, however, the most extensive by the time of writing. Second, the way one describes the functions of a construct is dependent on how the source chooses to aggregate a set of chores.

An example of this is <u>Artto et al. (2011)</u> that list all instances of Hobbs and Aubry while grouping the functions in different categories and extending the list. Their groups are a result of their literature study and not observations and are named: (1) managing practices, (2) providing administrative support, (3) monitoring and controlling projects, (4) training and consulting, and (5) evaluating, analyzing and choosing projects.

Finally, none of the studies mentioned thus far focuses on agile methodologies. The following subsection addresses the finding of the literature on agile.

2.2.3 The literature on the PMO in Agile

This study refined the search query to filter results mentioning agile methodologies (See appendix B.2). The effort yielded six relevant results, discussed here. Table 5 summarizes the findings of the review. Among the studies, there are single company reports. <u>Tengshe and Noble (2007)</u> describe the transition to agile of a firm in which the PMO performed training and coaching functions (functions 7 and 36) as well as creating their portfolio control standard (function 5). Scotland and Boutin [55] describe an adhoc hybrid agile implementation at "Yahoo!" demonstrating the roadmap of making traditional PMO and agile processes compatible. <u>Hodgkins and Hohmann (2007)</u> describe an institutionalization of a PMO performing backlog management (function 11) and stakeholder management (function 36) on a serving role.

On a similar note, <u>Power (2011)</u> describes the PMO at Cisco with the introduction of agile methods. The functions performed by the new institution include the development of standards (function 5), promoting agile within the organization (function 6) and training and mentoring personnel (functions 7 and 8 taking either serving or supporting roles. <u>Kulak and Li (2017)</u> support his apparent direction towards serving and supporting roles in agile. The authors argue that the PMO must fill a serving or supporting role in agile and avoid diagnostic control systems and boundary systems.

<u>Pinto and Ribeiro (2018)</u> conclude that the PMO in an agile context is no different from the PMO in traditional methodologies regarding which functions they perform in each scenario. The differences, if any, are found in the manner the PMOs perform such functions. That is, they differ in the roles assumed, the reach of their scope, and their control mechanisms.

	Reporting	Literature Review	Book
PMO enabled transition	Tengshe and Noble (2007)		
PMO working with agile	Scotland and Boutin (2008)		
Methods			
PMO role in an Agile	Hodgkins and Hohmann (2007)	Pinto and Ribeiro	Kulak and Li
context	<u>Power (2011)</u>	<u>(2018)</u>	<u>(2017)</u>

Table 5 - Distribution of Academic Literature on the PMO and Agile

There is a link between these publications and the ones discussed previously in 2.2. Agile proposes control mechanisms that relate to the definitions of belief systems and interactive control systems. The PMO associated with the functions of standardizing work, centralize reporting, control project/program/ portfolio is linked with Boundary systems and Diagnostic Control systems. This explains why the institution of a PMO entity can incur in reducing the autonomy of different areas of the project-based organization (Artto et al., 2011). The PMOs in the studies presented here assume or are prescribed to assume serving and supporting roles when performing these functions(Hodgkins & Hohmann, 2007; Kulak & Li, 2017; Power, 2011). That is, the responsibility lies with the development teams and not directly with the PMO.

2.3 The Standards and the PMO

Apart or complementary to the literature described so far, different standards describe the PMO. For simplicity and in line with previous work, this study divides them between Agile and Traditional standards. Under the traditional umbrella, there are PRINCE 2, PMBOK, and ISO21500:2012.

Under agile, there are, at least, Agile Framework (SAFe), Large Scale Scrum (LeSS), Discipline Agile Delivery (DAD), Scrum of Scums, Spotify Model, Enterprise Scrum, Lean Management, Agile Portfolio Management, Nexus, Recipes for Agile Governance in the Enterprise (RAGE) (<u>VersionOne, 2019</u>). However, only a number of these have written standards. Namely: SAFe, LeSS, DAD, Enterprise Scrum, Nexus, RAGE. Table 6 details how each standard treats the PMO.

This section discusses the description of the PMO in the multiple standards. Table 17 in Appendix F presents a complete parallel with the literature findings.

	PRINCE2	Traditiond PMBOK	al ISO 21500:2012	SAFe	LeSS	DAD	Agile Enterprise Scrum	Nexus	RAGE
Describes the	X	Х		Х	Х				
PMO									
PMO as an			Х						Х
external									
agent									
Excludes						Х			
No Mention							Х	Х	

2.3.1 Traditional

The Project Management Institute (PMI) defines the PMO as: "A management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques" (Project Management Institute, 2017, p. 40). The PMI classifies the PMO by the degree of control it has on projects. The three classifications range from low (Supportive) to high (Directive) degree of control and are as follow (Project Management Institute, 2017, p. 40):

- Supportive: the PMO is a unit that provides ad-hoc services to projects, such as templates, information, and training;
- Controlling: the PMO enforces compliance with company methodologies and standards, as well as governance policies;
- Directive: the project managers are part of the PMO, and the office allocates its personnel to projects.
There is a parallel between these classifications and the basic roles described in the opening of this previous section. Apart from those, the <u>Project Management Institute (2013)</u> recognizes five types of PMO on an extensive survey, namely:

- 1. **Organizational Unit PMO/Business Unit PMO/Divisional PMO/Departmental PMO** appointed by the study as the most common design encountered, this structure performs supportive management services to projects related to a specific business unit or department. Such as portfolio management, governance, operational project support, and human resources utilization.
- 2. **Project-Specific PMO/Project Office/Program Office** provides similar services as the previous but as a temporary structure explicitly related to a project or program.
- Project Support/Services/Controls Office or PMO "Provides enabling processes to continuously support the management of project, program, or portfolio work throughout the organization. Uses the governance, processes, practices, and tools established by the organization and provides administrative support for delivery of the project, program, or portfolio work within its domain." (Project Management Institute, 2013)
- 4. Enterprize/Organization-wide/Strategic/Corporate/Portfolio/Global PMO Similar to the mentioned function before, it is responsible for managing overall portfolio risk and alignment to the organizational strategy.
- 5. Center of Excellence/Center of Competency a supportive structure that curates standards, methodologies, and tools for projects within the firm.

It is possible to see some synergy between Hobbs and Aubry's functions and PMI's organizational structures. That is also somewhat in line with the three types of PMOs, according to <u>Giraudo and Monaldi (2015)</u>: Supportive, Controlling Directive. It follows that a PMO structure can behave as one or more types of Giraudo and Monaldi performing one or more of Hobbs and Aubry's groups of functions at different times.

PRINCE2 describes the PMO as "project support", a role closely related to quality management, but which holds no direct responsibility to the project. The responsibilities of the PMO are related to the process of monitoring project information as well as providing the tools needed to project managers to mitigate risks. The standard also prescribes that some firms may choose to assign both the attributions of the PMO and the project manager to the same individual (<u>Alexos, 2017</u>).

Finally, ISO21500:2012 mentions the PMO as an additional stakeholder to project management. It states that the PMO "may perform a wide variety of activities, including governance, standardization, project management training, project planning, and project monitoring" (<u>ISO, 2012, p. 7</u>). Although the framework includes the PMO, the description is abstract and open to interpretation.

2.3.2 Agile

From the written agile standards SAFe and LeSS define a PMO, DAD excludes the PMO from its framework, RAGE briefly mentions the PMO as an external party and Enterprise Scrum does not mention the PMO at all.

SAFe describes the PMO in different sections of the framework. First, as an agent of change that can leverage their "skills, knowledge, and relationships with managers, executives and other key stakeholders that are extremely useful in changing ways of working" (Scaled Agile Inc, 2018c). Further, the standard describes the functions of the PMO dubbed APMO (Agile Portfolio Management Office). The APMO incorporates the functions of facilitating communication and setting standards and KPI's, coordinating multiple programs (Value Streams), curating best practices and promoting the agile culture.

The large-scale multi-site format of LeSS (LeSS Huge) describes different organizational structures. Among them, there is the "Competence and Coaching" structure. The standard reads:

"The competence and coaching group consists of skillful practitioner-experts who actively Go See and observe how people work. They pair up and work with people to discover their training needs. [...] Coaches work with or in teams. They observe, pair, shadow, and question. They give observations, feedback, ideas, and examples of how the team can improve. Coaching happens on three levels: (1) organizational, (2) team, and (3) technical" (The LeSS Company B.V., n.d.).

The description incorporates the functions from the <u>Hobbs and Aubry (2007)</u> group "Development of Project Management Competencies and Methodologies" and is the closest resemblance to a PMO in the standard.

DAD clearly states that there is no PMO in its framework, and all its functions are obsolete or redistributed. Even so, it acknowledges that there could be organizations large enough to have a full division running on DAD and other divisions working under traditional methods. In which case, if there is a PMO, the standard recommends change managers to adopt an inclusive strategy(<u>Amber, 2013</u>). The PMO on DAD is an agent of change during the transition period and external to the framework. (<u>Lines & Ambler, 2012</u>)

2.4 Preliminary conclusions

This chapter discussed the literature available on the PMO extensively. Specifically, on the manner, authors and standards address the role of the PMO. It proposed a terminology to discuss such roles that embrace the complexity of the topic (Figure 1). The goal of the chapter is to answer research subquestions 1 and 2.

To answer RQ1 - How does literature describe the PMO in traditional and agile approaches?, this study looked at the academic literature on the PMO. It is quite extensive, complex, and dispersed across different topics. This literature research explored different publications to identify how they describe the roles of the PMO. Apart from Hobs and Aubry's works (compiled in <u>Hobbs and Aubry (2010)</u>), descriptions of the PMO are mild. The authors conclude that the PMOs' roles vary; they are path-dependent and in constant change.

As a result, there is no unified terminology to describe the PMO. Different authors use similar terms sometimes contradicting ways, and analysis often relies on subjective perceptions of abstraction levels. This study proposed an analogy with the performing arts to describe the roles of the PMO. Figure 1 describes the terminology and framework this study devised from the available literature to describe the PMO. There are four basic roles (coordinating, controlling, supporting, and serving), which can be assumed individually or in combination by the PMO when performing its functions (Table 4). Application of the framework to describe a PMO most likely results in a detailed portrait that captures its context-specific aspects.



Figure 1 - Role description framework

To answer RQ2 - This study investigated the different standards of project management and agile. There are very different descriptions of the PMO in both literature and standards. There are multiple reasons for this. First, standards establish directions for project management with different levels of detail. The ISO21500:2012 does not describe the PMO at length as it does not do to other actors in the project management environment either. The PMBoK presents a more extensive and detailed description, but with much room for interpretation. All three traditional standards considered in this study bundle prescriptive rules and recommendations in their formulation.

Standards propose definitions and rules to facilitate the replication of practice and tend to focus on critical elements of the practice they are defining. None of the standards observed here addresses the PMO as a fundamental piece. It could be that as a method is tested and evolves, it incorporates more actors, structures, and processes when standardizing more complex scenarios. SAFe has been doing for the past nine years or PMBoK for the past 23.

To the extent covered by the standards, the functions attributed to the PMO resonate with those form Hobs and Aubry. PMBoK presents the most comprehensive list of functions, and PRINCE2 complements this list by adding tasks mostly administrative in nature. The terminology proposed in Figure 1 allows the placement of the standards in the framework (Table 7).

Dimension	Description	РМВоК	PRINCE2	SAFe
	Coordinating	Directive		
Basic Role	Controlling	Controlling	Х	Х
basic Kole	Supporting	Supporting	Х	Х
	Serving	Supporting	Х	Х
	Monitoring and Controlling Project Performance	100% (4 out of 4)	75%	100%
Function Group	Project management Competences and Methodologies	80% (4 out of 5)	20%	20%
	Multi-Project Management	100% (4 out of 4)	0%	80%
	Strategic Management	44% (4 out of 9)	11%	22%
	Other	0% (0 out of 4)	75%	0%
	Not listed	0% (0 out of 9)	22%	0%

3 Case Study Set-Up

As mentioned in section 1.3, an explorative study consisting of semi-structured interviews of different cases was chosen to answer: "How is the role of the PMO conducted in practice in organizations that have implemented Agile methodologies?". Furthermore, support answering the questions: "How is the de facto role of the PMO in organizations which have implemented Agile methodologies different from their past role under traditional methodologies?" and "What patterns emerge from the change in the PMO's roles and their organizational context?".

The existing research on PMO's roles in agile does not provide enough evidence to support the formulation of testable hypotheses. The literature review highlighted the need to extend existing theory and further explore the topic to improve understanding of the PMO roles. The data collection process started with the design of a case study protocol, which was developed to increase the consistency of the research, ensuring that each interview covered similar questions and procedures (Yin, 2018).

This chapter is organized as follows. Section 3.1 describes the methodology used for the case studies and analysis. Section 3.2 introduces the cases selected.

3.1 Methodology

This study makes use of semi-structured interviews for collecting the data that answers the sub-questions 3, 4, and 5.

The interviews were recorded and transcribed with the expressed consent of the interviewees. The contents were analyzed by creating a description of the cases and organizations, attributing codes to the transcriptions. The author conducted the interviews, transcriptions, and analysis between August and September 2019.

3.1.1 Case Selection

As stated previously, in section 1.4, the object of study of this research is the PMO that oversees the highest aggregation level of projects and products on a financial sector organization. In this position, the PMO should have close links to the overall strategy as well as experiencing the impacts of agile on a large number of teams. This study proposes the following criteria for selection based on the literature presented in Chapters 1 and 2:

- The organization has at least ten teams working with agile methods;
- The organization has a PMO and had a PMO before the agile implementation;
- The organization still has a PMO;
- The PMO in both cases is involved in all levels of product and project management;
- The teams work in projects with a strong IT focus;

The study resorted to Accenture's present and former clients and invited professionals directly involved with the phenomenon under observation. The author sent invitations to people who act or acted as a leader of the PMO, as a consultant in the transition to agile, as a member of the development teams, or as the reporting point of the PMO. This process resulted in an initial list of 12 organizations, of which six were chosen to participate based on the availability for interviews. The selection process involved a consultation by e-mail, followed by an introductory talk mainly over the phone. Albeit this care on screening, the interview processes revealed that some cases were still not a good fit. This study included three out of these six because of their fit to the described criteria, knowledge of the processes involving

the PMO by the participants, and completion of results. Section 3.2 details further the reasons for excluding cases.

3.1.2 Data collection

The study opted for semi-structured interviews, as this method allows for rich and systematic data collection (Corbin & Strauss, 2015). The interview remains conversational, which permits the researcher to dive deeper into different questions. This freedom helps the interviewer to clarify ambiguities that may arise on the spot. The flexibility is fundamental for an exploratory study. Based on the literature presented in section 1.1 and more specifically, in chapter 2, a protocol for the semi-structured interviews was created (see Appendix C).

This study has shown how vast the topic of PMO is, and the timeframe most respondents usually have available may not be enough to cover the full extent of it exhaustively. Moreover, the inquiries proposed in this research usually spans years and resorts to the memory of participants for clarification. To both serve as a point of triangulation of information and circumvent the difficulties the interview format imposes, the study included a survey with the interview participants.

The participants were asked to fill in a survey at the end of the interview. The survey consisted of the list of functions in Table 4. The task consisted of ranking each task on a five-point Likert scale representing the significance of each function if the role of the PMO for both the periods before the agile transition and after. Where five indicates that the function is significantly related to the job of the PMO, and one indicates that the function is not a significant part of the job while it is still within the scope of the PMO. The participants were also asked to indicate which one of the basic roles (coordinating, controlling, supporting, or serving) were taken by the PMO when performing them, again for both periods.

The interviews had three segments. First, there was a brief introduction to the research, and the stated consent forms were collected. Second, the semi-structured interview was conducted and recorded. Finally, the candidate was asked to fill in the survey.

3.1.3 Data Analysis

The data analysis part starts with a full description of each case, followed by a full transcription of each interview and coding and the analysis of the quantitative survey data. The interviews were coded on the platform Atlas.ti 8 using open coding, which gave an overview of the themes discussed by participants. The process of coding consisted of thoroughly reading all transcripts identifying relevant segments for analysis with an explanatory text. There was a new code whenever a relevant topic was detected. After completing the coding process, the author grouped the codes and identified their relationships. Figure 2 illustrates the number of codes created in this process.

The survey results were transcribed into a Microsoft Excel spreadsheet and processed with the tool. A combination of Tableau and Excel Pivot tables was used to explore the data and plot the graphs used in this thesis. The study ran an internal consistency test on the survey. The results of the quantitative and qualitative analyses were used together to identify patterns and common themes through inductive reasoning.



Figure 2 - Saturation of codes

3.2 Case Description

The effort consisted of 13 semi-structured interviews with approximately 1h. The interviews were conducted either in the participants' offices or virtually with the use of Skype Broadcast. The interviews had the participation of the author and the participant only. In some instances, whenever the interview happened in a public area, other people may have been in the vicinity. However, there was no interaction with anyone else during the interview time.

Out of the 13 interviews conducted, this study used nine for analysis. The remainder were disregarded wither due to incomplete data, limited knowledge on the PMO and its scope, or lack of more participants from the same company. One interview of Case A was used as a test to the process and excluded from the data. Table 8 summarizes the cases analyzed.

To ensure the validity of the findings and prevent respondents' biases, there was more than one interviewee per case with different experiences on the phenomena. Having different professionals describing the PMO enriches the analysis as the roles of the PMO are dependent on their relationship. (Aubry & Hobbs, 2011). Sections 3.2.1,3.2.2 and 3.2.3 discuss in length the included cases.

Case	Industry	Agile method	Agile	Interviewees
			Teams	
Case A	IT Department of a	DevOps, Scrum, and	100	Agile Coach – 1
	Financial Group	Kanban		PMO manager – 1
				Project Manager – 1
Case B	IT Organization of	Scrum, Kanban, eXtreme	100+	Consultant - 2
	an Insurance	Programming and SAFe		
	Company			
Case C	Financial Services	SAFe	1000 +	Release Train Engineer – 1
				c
				Member of the PMO - 1
Case D	Retail	Scrum, LeSS	10+	Consultant - 3

Table 8 – Case summary

3.2.1 Case A – Large Multinational Dutch Pension and Insurance Group

Case A is a large pension and insurance group from the Netherlands with operations in the European Union and the United States. The business has siloed business units, each responsible for a different type of financial portfolio. The firm employs over 10 thousand people nationally, and its project-based organization crosses the different business units. Over a hundred teams are working with agile methods.



Figure 3 - Simplified illustration of the PMO's level in Case A

The first scrum teams started appearing in 2011 out of the independent initiative of different groups. The formal organizational migration to Agile was a top-down decision carried out between 2016 and 2017. The PMO in this firm is called Central PMO (CPMO), and it contains different professionals, among them Agile Coaches, Program and Project leaders, and staff specialized in reporting to upper

management. The PMO is a department under the CIO (Central Information Office) and oversees its programs. The study heard the PMO manager and a program manager, who is part of the PMO. The study also heard an Agile Coach who had been a PMO manager before the transition to agile.

Figure 3 presents a simplified organogram of the project-based organization of Case A. The PMO sits in the portfolio level overseeing a set of high-interest programs. The company classifies a program as high interest by considering factors such as the program's risk, total cost or budget, and how critical it is to the roll-out of its overall strategy. Although the company considers having implemented agile on a large scale, some programs make use of traditional methodologies, and the interview did not report agile methods in use out of the project-based organization.

3.2.2 Case B – Large Multinational US Insurance Firm

Case B is a large multinational insurance firm from the US with operations in Ireland, Canada, and India. The company was founded in 1931, went public in 1993, and has over 45 thousand employees in its workforce. The company has a siloed division between Business and IT. Both interviewees were consultants in the latter. Over 100 teams are working with agile methodologies in their IT department. The methods used are Scrum, Kanban, eXtreme Programing, and some elements of SAFe. The different methodologies are a result of how agile culture started in the firm. Their practices in different continents began experimenting with agile independently. The decision to formally migrate the whole IT organization to SAFe came after teams were somewhat mature in the standard of their choice. The process of transitioning the whole firm formally started in 2015.

The case is relevant due to the path taken towards scaling and illustrates a build to suit standard in a highly regulated sector. During the transition, the PMO assumed an embracing position to change and became a steering actor in the process. The case exemplifies the effects of the political game within the firm in the scope of the PMO. This study interviewed two Accenture consultants involved directly in the transition of this firm to agile ways of working. Both professionals are Accenture employees and were part of the case company as external consultants during an extended period. Enough to observe it running under traditional and agile methodologies.

Figure 4 presents a simplified organogram of the project-based organization of Case B. The PMO is involved with all the firm's IT programs and sits at the portfolio level. There is a second PMO in the firm that oversees what has been called business programs. The boundary between the business and IT is not always clear, and in some programs, both PMOs are involved. There is a figure of a Product Owner, described in agile as the figure that collects stakeholder requirements for product development in the form of stories and organizes them in a construct called backlog (Meyer, 2014, p. 80). The business organization fills this spot.



Figure 4 - Simplified illustration of the PMO's level in Case B

3.2.3 Case C – Large Multinational Swiss Financial Services Firm

Case C is a large multinational Swiss bank with teams spread worldwide. It employs over 45 thousand people and has over a thousand teams working with agile methodology. It runs SAFe in the essential format (Figure 5) on an aggregate level. The transition to SAFe started in 2016. However, every team is individually autonomous to choose its method. Therefore, there are individual scrum teams, Kanban, LESS, waterfall hybrid. The interviewees attribute this variety to the location distribution of the teams and local cultural factors.

There is a distributed PMO in a hub-spoke design, and there is a central entity overseeing release trains and smaller units spread out across different programs individually. This study interviewed a Release Train Engineer and a member of the central PMO entity, who is an external consultant from Accenture.

Figure 6 presents a simplified organogram of the project-based organization of Case C. There are two levels of PMO in the firm, the portfolio level called Value Management Office and the program level called Program Management Office. A member of the PMO can provide services to one or more programs (Release Trains) and their Release Train Engineer (RTE) depending on the program's complexity. The release trains are part of a value stream. There is not a fixed number of value streams and release trains. This study had access to the program management office. Both the PMO interview and the RTE were involved in the same release train.



Figure 5 - Essential SAFe Diagram (extracted from (<u>. Scaled Agile Inc, 2018</u>)



Figure 6 - Simplified illustration of the PMO's level in Case C – the level of the interviewed PMO highlighted in orange

3.2.4 Case D - Large Dutch Retail Company

Case D is one large retail holding from the Netherlands with operations in other countries. There are several independent companies within the group. These companies are called domains, and each of them covers a section of the overall business. For instance, there is an eCommerce domain, a supply chain domain, a physical domain. The firm employs over 200 thousand people globally nationally, and its project-based organization crosses the different business units. Over a hundred teams are working with agile methods. There is a central IT organization overarching the IT departments of each independent company.

When the project organization ran on traditional methods, there was a central PMO within the central IT organization from where the independent domains drafted project managers to their projects. With the transition to agile, the firm dismantled the central PMO and staffed a distributed PMO in each separated domain. Thus, each company had its PMOs, which sat at the program level. Some projects in the company used traditional methods after the transition, and there were dependencies between agile teams and waterfall projects.



Figure 7 - Simplified illustration of the PMO's level in Case D – the level of the interviewed PMO highlighted in orange

The following chapters show the outcomes of the processes described in this chapter. Chapter 4 presents the main results of this research and further discusses the findings, and Chapter 5 discuss and positions them in the overarching literature.

4 Case Results and Analysis

This chapter presents the results of the interviews conducted on the three cases investigated. The results in this chapter come from semi-structured interviews with nine professionals in the four companies. These interviews happened in July and August of 2019, and the author was present in all of them. The full extension of the transcripts and survey results are available in Appendix H.

The goal of this chapter is to summarize the results of the research conducted and answer sub-questions "RQ3 - How is the role of the PMO conducted in practice in organizations that have implemented Agile methodologies?", "RQ4 - How is the de facto role of the PMO in organizations which have implemented Agile methodologies different from their past role under traditional methodologies?" and "RQ5 - What patterns emerge from the change in the PMO's roles and their organizational context?".

This study followed a descriptive exploratory research design described in the previous chapters. It conducted interviews with nine participants from four different companies. The naturalistic inquisition approach to analyzing the data did not reveal a grouping of these interviews that offered the best explanation for the observed variance in the data. Having far fewer predictors than variables in the survey data made sophisticated clustering statistical analysis unfeasible. Table 9 describes the predictors or descriptive variables of the interviews, and the variables were the 360 data points comprising of value and role for each one of the 36 functions under traditional and agile environments.

As the number of respondents is small, this chapter presents the data individually and eventually conducts the analysis grouping the interviews by their companies. This approach is sound with <u>Corbin and Strauss (2015)</u> qualitative research guidelines. Presenting the data in full and discussing it in aggregate ensures that the predictor variables do not bias the analysis. Instead, the grouping serves a coherent narrative purpose. Previous studies suggest that firms establish PMOs to address particular problems and PMOs' designs vary between organizations (<u>Hobbs & Aubry, 2007</u>; <u>Müller et al., 2013</u>). For this reason, this study assumes that grouping the interviews per company contemplate the contextual characteristics of their formation. However, due to the limited number of cases investigated, the results presented here are indicative of trends that may exist in the population rather than conclusive.

Interview	Case	Sector	Respondent	Interviewee's Position in Traditional	Interviewee's Position in Agile	Number of different PMO levels in the firm	Н	Interviewee's Relationship with the PMO	Present in both Agile and Traditional periods	
1	A	Financial	CASE A - PMO Manager	Program Manager	PMO Manager	1	Portfolio	Lead	Yes	Internal
2	A	Financial	CASE A - Program Manager	Program Manager	Program Manager	1	Portfolio	Client	No	Internal
3	В	Financial	CASE B - Consultant UK	Agile Coach	Agile Coach	1	Portfolio	Service provider	Yes	External
4	В	Financial	CASE B - Consultant US	Agile Coach	Agile Coach	1	Portfolio	Service provider	Yes	External

Table 9 - Interviewee Profile

5	С	Financial	CASE C -	Program	RTE	1	Program	Client	Yes	Internal
			RTE	Manager						
6	С	Financial	CASE C -	PMO	PMO	1	Program	Part of	Yes	External
			РМО				-	the		
								PMO		
7	D	Retail	Case D -	PMO	Scrum	2	Program	Service	Yes	External
			Consultant 1		Master		-	provider		
8	D	Retail	Case D -	РМО	РМО	2	Program	Part of	Yes	External
			Consultant 2				-	the		
								PMO		
9	D	Retail	Case D -	PMO	PMO	2	Program	Part of	No	External
			Consultant 3					the		
								PMO		

The chapter is structured as follows. Section 4.1 presents the results of the research that describe the PMO post agile transition in the observed cases. Section 4.2 addresses the differences between the PMO in a traditional project management environment and an agile environment. Section 4.3 explores the potential patterns observed in the interviews. Finally, section 4.4 summarizes the main findings of this research.

4.1 The role of the PMO under agile in practice

Considering the list described in Table 4 and the cases presented in chapter 3, the PMO in an agile environment performs a broad range of functions. Among these functions, the group "Monitoring and Controlling Project Performance" ranks the higher on average across all participant's reports in the study. At least five participants, out of the nine included in this study, have graded all four functions in the group above three, and two have grades above 4. "Development of Project Management Competencies and Methodologies" and "Multi-Project Management" tie in second (Table 10). Both with three out of five functions graded above three by at least five participants and one above four. The Supporting role is the predominant role in the population. It was the most frequently attributed to eighteen functions, followed by the controlling role attributed most frequently to thirteen functions, the coordinating role, eight and the serving role to seven. Figure 8 summarizes these findings.

The respondents highlighted in the interviews the processes related to the "Monitoring and Controlling Project Performance" group as a fundamental aspect of the PMO. The PMO in agile environments is an external agent to the development and delivery teams in the case study. The PMOs are usually in charge of activities related to resource management, risk management, standardization of processes, reporting, compliance, and governance. The PMOs are also a bridge between the agile project organization and the traditional project organizations in the firm. All cases observed had agile and traditional practices coexisting. Reporting the development of agile teams to higher hierarchical levels using traditional processes is repeatedly a struggle that participants report. The PMOs perform all four roles (controlling, coordinating, supporting, and serving). However, the four cases at hand are very distinct from each other as it becomes clear from Figure 9.

Figure 9 shows the combination of functions and basic roles each PMO performs in each case in more detail. No two descriptions are the same, and the PMO's description varies between cases and within cases. There are specific facets in each of the analyzed reports, which may be a reflection of the idiosyncrasies of each project (or collection of projects), causing the PMO to assume a different scope in each instance. The plot is a result of the data collected with the surveys at the end of each interview.

The PMO of Case A is mostly not involved in the functions from the groups "Development of Project Management Competencies and Methodologies" and "Strategic Management" because there is a separate entity responsible for the work and quality standards in agile. The primary focus of the PMO is managing the project's information. The responsibility for reporting is decentralized and mainly lies with

the individual development teams. The software tools used to track performance automate most of the work of structuring and distributing the documentation. The PMO has two main concerns monitor in aggregate the portfolio's performance and carefully control the high interest and high-risk development initiatives.

Function Group	Functions graded three or more by at least five participants				
Monitoring and Controlling	Report project status to upper management*				
Project Performance	Monitoring and control of project performance*				
	Implement and operate a project information system				
	Develop and maintain a project scoreboard				
Development of Project	Develop and implement a standard methodology*				
Management Competencies and	Develop competency of personnel, including training				
Methodologies	Provide a set of tools without an effort to standardize.				
Multi-Project Management	Coordinate between projects				
	Manage one or more portfolios				
	Manage one or more programs*				
Strategic Management	Provide advice to upper management*				
	Monitor and control the performance of the PMO				
Other	Project administrative support*				
	Portfolio problem solving				
	Cost/benefit analysis of projects				
*Graded four or more by at least fi	ve participants				

Table 10 – List of high grading functions of the PMO in agile environments

The PMO of case B performs most of the functions in the list with a predominant supporting and serving role. All function groups rank high (greater than 3) on average while the functions of the group "Development of Project Management Competencies and Methodologies" rank slightly higher. According to the interviews, the PMO in this firm proactively positioned itself at the center of the training and mentoring of the personnel processes.

The PMO of case C is mainly involved in the financial control of programs (Value Streams and Epics) expressed in the high ranks of the "Monitoring and Controlling Project Performance" group. The PMO performs the functions in this group through a combination of all roles while controlling and coordinating are slightly more expressive. The PMO is also involved in the functions of the remaining groups, where the supporting role is the most expressive one. There is a significant disparity between how the RTE (Release Train Engineer) sees the PMO and how the PMO reports itself. The disparity may reflect that the PMOs' functions have context-specific capacities. The interviewed PMO presents their views on their role while the RTE views relate to a broader group of PMOs.

The PMO of case D presents the most variance in the set. As Chapter 3 covered, Consultant 1 worked as a Scrum Master in the agile period, and as a PMO in the traditional period, Consultant 2 as a PMO in both periods and Consultant 3 joined the firm only in the agile period in the same capacity. The disparities in the group of case D may reflect the specificities of each program under the scope of each PMO. Consultant 1 reported a predominantly supporting role for the PMO in most functions, while consultant 2 reported a balance between the controlling and the serving role, and consultant 3 reported a predominantly coordinating role.



Frequency of grades per function during the agile period with the most frequent associated role indicated

Figure 8 – Stacked bar plot depicting the number of respondents grading the level to which each function is related to their PMO in an agile environment. The plot indicates the most frequently attributed basic role to each function. Zero indicates that the function was not applicable. The number of respondents was nine.



The relevance of function to the PMO in agile as stated by the participant shown with each function's role composition

Figure 9 - Bar plot of function's marks stated by the participants on the PMO in an agile environment. Data collected in the post-interview survey. The Colors indicate the basic roles the participants associate with a given function. Multiple colors in a bar mean that there was more than one basic role used

4.2 Differences between the PMO before and after agile

This section answers "RQ4 - How is the de facto role of the PMO in organizations which have implemented Agile methodologies different from their past role under traditional methodologies?". Figure 10 presents how each function relates to the PMO in a traditional context, according to the participants. There are seven participants represented in the graph as two respondents were not involved with their firms before the introduction of agile There are some similarities and differences between both scenarios. The functions of the group "Monitoring and Controlling Project Performance" strongly related to the PMO within the traditional context, and remained so during the agile period. The functions "Develop and implement a standard methodology," "Manage one or more programs," "Project administrative support," and "Portfolio problem solving" similarly remained strongly related to the PMO after the transition to agile methods (Table 11).

Function Group	Functions graded three or more by at least five participants					
Monitoring and	Report project status to upper management*					
Controlling Project	Monitoring and control of project performance*					
Performance	Implement and operate a project information system*					
	Develop and maintain a project scoreboard*					
Monitoring and	Develop and implement a standard methodology*					
Controlling Project						
Performance	Promote project management within the organization					
Multi-Project	Manage one or more programs*					
Management	Allocate resources between projects					
Strategic						
Management	Manage archives of project documentation					
Other	Implement and manage a risk database*					
	Execute Specialized Tasks for Project Managers					
	Project administrative support*					
	Portfolio problem solving					
	Risk management*					
	Project/program delivery management*					
	Managing stakeholders					
*Graded four or mor	e by at least five participants					

Table 11 List of	high angling	from a tion a of t	ho DMO in	twa ditional	and in a man and to
Table 11 - List of	man araana	INDCHORS OF I	ne PNO m		environments
1 4010 11 1101 0]	rugit gi aatig	June 01 0			011011011101110

In bold are the functions that remained strongly related to the PMO within agile.

On the other hand, the respondents report significant differences between the PMOs in each firm before and after the introduction of Agile. The change is also present in the survey results. There seems to be a migration from a predominantly controlling profile to a balance between supporting and controlling with the introduction of agile (Table 12).



Frequency of grades per function during the traditional period with the most frequent associated role indicated

Figure 10 - Stacked bar plot depicting the number of respondents grading the level to which each function is related to their PMO in a traditional environment. The plot indicates the most frequently attributed basic role to each function. Zero indicates that the function was not applicable. The number of respondents was seven.



The relevance of function to the PMO in traditional methods as stated by the participant shown with each function's role composition

Figure 11 - Bar plot of function's marks stated by the participants on the PMO in a traditional environment. Data collected in the post-interview survey. The Colors indicate the basic roles the participants associate with a given function. Multiple colors in a bar mean that there was more than one basic role in use.

Table 12 – Number of times a role was the most attributed to a function in each period

Role	Traditional	Agile
Coordinating	5	8
Controlling	27	13
Supporting	6	18
Serving	2	7

In all cases, there was some change in the role the PMO performs or in how related a function was to the PMO's scope. In Case A, over 70% of the function the PMO performs changed. In cases B and c, over 85% and, in Case D, almost all functions saw some change (Table 13). Participants mentioned that the introduction of agile renders some functions obsolete and decentralizes the responsibilities of other functions to include the teams and other actors, which is one explanation to the changes in roles and relevance of the functions to the PMO. One respondent exemplifies this phenomenon by mentioning that his firm redirected the responsibility for budget planning to the Scrum Masters:

> "[On] Budgetary control, [the PMO] had taken a very strong ownership of it before I was there. But, increasingly, they [the firm] were looking to move some of those responsibilities onto the scrum masters shoulders [...]. So budgetary commitments were something that was distributed out to scrum masters [from the scope of the PMO]." (Case *B* – *Consultant UK 00:09:25*)

Table 13 - Change in Functions of the PMO. In this table, a value 1 means that there has been a change either in the role or in value. 0 means there was no change, and a blank field indicates that the PMO did not have the function and still does not.

		Ca	ses	
	Α	В	С	D
Functions by Group	(n=1)	(n=2)	(n=2)	(n=2)
Monitoring and Controlling Project Performance	1	4	4	4
Report project status to upper management	0	1	1	1
Monitoring and control of project performance	1	1	1	1
Implement and operate a project information system	0	1	1	1
Develop and maintain a project scoreboard	0	1	1	1
Development of Project Management Competencies and				
Methodologies	3	5	5	5
Develop and implement a standard methodology	1	1	1	1
Promote project management within the organization	1	1	1	1
Develop competency of personnel, including training		1	1	1
Provide mentoring for project managers	1	1	1	1
Provide a set of tools without an effort to standardize		1	1	1
Multi-Project Management	3	5	4	5
Coordinate between projects		1	1	1
Identify, select, and prioritize new projects	1	1	1	1
Manage one or more programs	1	1	0	1
Manage one or more portfolios	1	1	1	1
Allocate resources between projects.		1	1	1
Strategic Management	4	8	7	5
Provide advice to upper management	1	1	1	1

Participate in strategic planning	1	1	1	1
Benefits management	-	1	1	
Network and provide environmental scanning	0	1	1	
Monitor and control the performance of the PMO	0	0	1	0
•		-	_	-
Manage archives of project documentation	1	1	1	1
Conduct post-project reviews		1	1	1
Conduct project audits	1	1	0	
Implement and manage a database of lessons learned		1	1	1
Other	4	10	10	11
Implement and manage a risk database.		1	1	1
Execute Specialized Tasks for Project Managers	1	1	1	1
Manage customer interfaces		1	0	1
Recruit, Select, Evaluate, and Determine Salaries for Project				
Managers		0		
Project administrative support		1	1	1
Work-family equilibrium		0	1	1
Developing the change management database	0	1	0	1
Portfolio problem solving	0	1	1	1
Cost/benefit analysis of projects	1	1	1	
Risk management	0	1	1	1
Project/program delivery management	1	1	1	1
Project management benchmarking	1	0	1	1
Managing stakeholders		1	1	1
Total change	5	4	4	1
Total no change	12	27	26	25
Percentual change	71%	87%	87%	96%

Contrasting Figure 11 and Figure 9, there is a significant reduction of the scope of the PMO in Case A. As a result of the agile transition, the firm created an independent structure to curate the agile standards. Therefore, the group "2: Development of project management competences and methodologies" grade much lower in agile than it did in the traditional environment for Case A's PMO. In cases B and C, on the other hand, the PMO incorporates scope in both group 2 and group "4: Strategic Management", which could be a result of the reduction of more administrative work in their scope.

There is a shallow resemblance between the accounts of the participants of case D. There seems to be a core attribution of the PMO within the functions of the group "Monitoring and Controlling Project Performance" while the remaining groups appear to behave on an ad-hoc basis.

4.3 Patterns observed

This section answers "RQ5 - What patterns emerge from the change in the PMO's roles and their organizational context?". The previous section described how the roles of the PMO are different from traditional methods to agile methods; most of the cases had significant differences between the two periods. This section's goal is to identify possible patterns in these cases.

4.3.1 Rise of supporting and serving roles

The first pattern is the tendency to reduce the controlling participation in the role mix, favoring the increase of supporting and serving roles. Figure 12 illustrates this shift. There, the share of functions classified as controlling reduces, and the share classified as supporting and serving increases in every case. The pattern is not apparent in Case A due to the descoping of the PMO described in Chapter 3. One participant clearly states this in the passage:

"I see retrospectively the journey that this particular client took was to try to move away from the PMO as a control organization and more into the other three types [Coordinating, supporting and serving] [...]I mean a lot of these [functions] started [in the period before the transition] as a control mechanism and then [with agile ways of working] pivoting into those others." (Case B – Consultant 2 00:43:18)

Number of functions within a role grouped by case and period; labels indicate the number of functions reported by the respondent



Figure 12 - Number of functions classified in each role according to the participants' reports grouped by case, period, and role. The labels illustrate the total number of functions the participant associated with the PMO. CR stands for the coordinating role, CT for the controlling, SP for the supporting, and SV for the serving.

This pattern is identifiable in other perspectives as well. Figure 13 groups the data by the level of the PMO in the firm and show a reduction in the average number of functions performed in a controlling role between the traditional and agile, as well as an increase in the average number of functions performed with supporting and serving roles. Figure 14 groups the data by the respondent's position in agile and shows the same pattern for all positions except the PMO Manager. The PMO Manager is a participant from Case A in which the PMO has lost most of its scope. For the Scrum master, there is no variation on the number of functions in the serving role.

Figure 15 groups the data by the respondent's relationship with the PMO. The respondents who provide services to the PMO (Coaches and consultants) and members of the PMO reported the reduction of the average number of functions in the controlling role and the increase in supporting and serving roles. The

same is not valid for the lead, who is the PMO Manager, and exhibits the same behavior described in the previous views.

Figure 16 groups the data by the respondent's relationship with the case's firm. External respondents report this pattern, while participants who are employees of the analyzed firms do not. However, this is not related to this descriptive variable. There are three internal respondents, the PMO manager and the Project manager from Case A and the RTE from case C. For the RTE the pattern repeats itself, while, for the PMO Manager, it does not for the exposed reasons. The Program Manager did not respond to the survey for the traditional period; therefore, there is no basis for comparison.

Number of functions within a role grouped by the PMO's level in the organization and period; labels indicate the number of functions reported by the respondent

PMO Level	Period																						
Portfolio	Traditional		H 0 5	⊢ ● 1	11					• 10	•	H 0 21			-5 • 7	H			●1 H				
	Agile	⊢	2	H 10)			4	H 🗈 60	8					H 8		• 15		 - 2	6			
Program	Traditional		1 4				27 🜗			e	0 0 17		27 	 2	●● 7				02	∎ 4			
	Agile	0	2		1 3			€ 2	- 6 (9			27 🔴	• 1	• 7	• 11		0 20		04 🕕 6			0 20
		0	5	10	15	20	25	0	5	10	15 2	20 2	5	0	5	10	15	20	0	5	10	15	20
					CR					С	т					SP					SV		
Consultan Consultan Consultan Consultan Consultan PMO PMO Mana	nt 2 nt 3 nt UK nt US																						

Figure 13 - Number of functions classified in each role according to the participants' reports grouped by PMO level in the organization, period, and role. The labels illustrate the total number of functions the participant associated with the PMO. CR stands for the coordinating role, CT for the controlling, SP for the supporting, and SV for the serving.

Number of functions within a role grouped by the respondent's position and period; labels indicate the number of functions reported by the respondent

Agile Coach	Traditional		05	•	11						0 0 21			0507				•1				
	Agile			• 1	0				0 0 8							0 15	0 21		• 6	10		
PMO	Traditional	(3				27 🌗			14		27 🌗	1 2					0 2				
	Agile	•	2		13			<u>●-2</u>	6			27 🌗	₽ 1−−	0 7			- 20		4 🕕 6			
PMO Manager	Traditional	(3						•	10					• 12				• 5			
	Agile	•	2						• 6					• 8				02				
Program Manager	Agile	0						•	4					• 7				•1				
RTE	Traditional	• 1								•	17			• 7					4			
	Agile	•	2						• 9						• 11				• 6			
Scrum Master	Traditional		• 4							• 15				• 6					4			
	Agile	•	2						• 9					• 7				•	4			
		0	5	10	15	20	25	0	5 10	15	20	25	0	5	10	15	20	0	5	10	15	20
					CR					СТ					SP					SV		
Participant																						
Consultant 1																						
Consultant 2																						
Consultant 3																						
Consultant UK																						

respondent

Consultant US

PMO

PMO Manager

Program Manager

RTE

Figure 14 - Number of functions classified in each role according to the participants' reports grouped by the participant's position in the organization, period, and role. The labels illustrate the total number of functions the participant associated with the PMO. CR stands for the coordinating role, CT for the controlling, SP for the supporting, and SV for the serving.

Number of functions within a role grouped by respondent's relationship with the PMO and period; labels indicate the number of functions reported by the respondent

Client	Traditional	• 1									• 17	1			• 7					₿4			
	Agile		2						4	9					17	11			01	0			
ls part of th	e Traditional		3				27 🌗			•	14		27 🌗	0 2					0 2				
PMO	Agile	•	2 1		0 13			<u>₽</u> -2-1	6				27 🜗	● 1 →	0 7					-4 () 6			
Lead	Traditional		3							• 10						• 12	2			• 5			
	Agile	•	2						• 6						•	8			02				
Service	Traditional		HD 5	⊢ ∎1	.1						0-15	1 1 1			● ● 7					₿4			
provider	Agile	•	2	I 10					0-50M	9					● 7		0 15	1 21	. (H 0 6 H			
		0	5	10	15	20	25	0	5	10	15	20	25	0	5	10	15	20	0	5	10	15	20
					CR					(ст					SP					SV		
Participant Consulta Consulta																							
Consulta	int 3																						
Consulta	int UK																						
Consulta	int US																						
PMO																							
PMO Mar	nager																						
Program	Manager																						
RTE																							

Figure 15 - Number of functions classified in each role according to the participants' reports grouped by the participant's relationship with the PMO, period, and role. The labels illustrate the total number of functions the participant associated with the PMO. CR stands for the coordinating role, CT for the controlling, SP for the supporting, and SV for the serving.

Relationshi.. Period

Number of functions within a role grouped by the respondent's relationship with the case and period; labels indicate the number of functions reported by the respondent

External	Traditional		+00 5	•	11		27 😐			•	15 0	+ 21	27 🌗	♦ 1 2	0 🕶 7				0 2	• 4			
	Agile		2	•• 1	0 🖡 13		- 25	<u>♦ 2</u>	•6••	9			27 😐	1	• 7		• 15	+ 21		•4•6	10		0 20
Internal	Traditional	•1	03							• 10	17				• 7	12				0 0 5			
	Agile	• •	2					•	406-0	9					+	8			H 0 2	⊢● 6			
		0	5	10	15	20	25	0	5	10 1	5 2	20 2	25	0	5	10	15	20	0	5	10	15	20
					CR					СТ						SP					SV		
Consulta Consulta Consulta	nt 2 nt 3																						
Consulta Consulta																							
PMO																							
PMO Mar	nager																						
Program	Manager																						
RTE																							

relationshi.. Period

Figure 16 - Number of functions classified in each role according to the participants' reports grouped by the participant's relationship with the case's firm, period, and role. The labels illustrate the total number of functions the participant associated with the PMO.

4.3.2 Software tools enabled the distribution of tasks

The participants' reports from cases B and C indicated that a new generation of project management software tools associated with the agile process designs enabled the teams to take the responsibility of tasks usually associated with the PMO. What was once a very specialized skill could be done with relative ease with the use of tools such as JIRA and Confluence. It is was not possible to isolate the findings in this research from the implementation of automated processes. The tools allow repetitive work to be automated, reducing knowledge barriers to their execution. This way, most of everyday reporting and risk management became part of the development team's scope and reduced the time the PMO spent with administrative tasks. The following quote illustrates how a participant from case C perceived the phenomenon.

"[With JIRA], there is no manual effort required to check what is my delivery output for a certain sprint or cadence. Even for a release, [a full release requires a collection of sprints]. So I think a lot of this stuff, which probably earlier was done manually [...] comes out of the tool just on the click of a button. And that[...] has given some ease there. [...]I would say processes have been optimized and [...] reduced to the minimum required." (Case $C - RTE \ 00:18:29$)

4.3.3 Emergence of structure

In all cases explored in this research, the autonomy of development teams goes as far as choosing their ways of working independently. That means that the operational level of development is not standardized in the cases discussed. As a result, different teams use different indicators to track their progress. The participants report that this practice harms inter-team comparability and communication, which harms the integration of the output of different teams.

There are two complications derived from the inter-team dissonance. First, decision-makers in the firm have a tougher time making sense of the different streams of data and are more prone to error. Second, the teams caught up in the continuous delivery loop get alienated from the firm's long-term mission, goals, and strategies.

These issues are not new to the firm, and enterprises have devised means to coordinate work in several complex scenarios. A participant exemplifies how the need for structure manifests itself, and traditional methodologies can be incorporated into the agile environment to solve this coordination issue.

"Well, it goes with the agile transition that people start getting a bit at allergic to any kind of standardization. So, then you usually go through a cycle that first people say: 'well, we had the old way of working and now we have got agile. So, we forget everything [we did before]. We will just find it out [, **the best way of working, independently by**] ourselves.' And [...] now they are gradually going back **[on this decision**]. Because, well, you do have to meet some standards. At least the external standards that are set by the regulators. And then it helps if you have a quality system if you have things **[tools and processes]** available. That you do not have to reinvent the wheel every time." (Case A - PMO Manager 01:03:56)

4.3.4 The PMO is continuously changing

The interviews closed with an open question for the participant to share insights on what they felt was relevant to understand the PMO in their organization further. Most of the responses hinted to an unsettlement of the PMO. The PMO and possibly other actors in the firm are not yet accommodated, in the sense that they are always incorporating extra functions, participating in new networks, and tweaking

the way they do their jobs. One participant brings a personal anecdote to illustrate that agile will not be the end of the changes because there will always be a new thing.

"There is always [a new philosophy], I have seen that a number of times in this company, but also elsewhere. That there is always this balance [of] going this way and that way. [As an example,] everybody goes into PRINCE2. And then the theory of constraints. We have had them all." (Case A - PMO Manager 01:06:45)

4.4 Chapter summary

This section summarizes the results presented in this chapter answering the research questions: "RQ3 - How is the role of the PMO conducted in practice in organizations that have implemented Agile methodologies?", "RQ4 - How is the de facto role of the PMO in organizations which have implemented Agile methodologies different from their past role under traditional methodologies?" and "RQ5 - What patterns emerge from the change in the PMO's roles and their organizational context?".

4.4.1 RQ3 - How is the role of the PMO conducted in practice in organizations that have implemented Agile methodologies?

The scope of the PMO in an agile context vary between companies, and even within companies. A common trait is that the PMO is strongly related to reporting, governance, and risk management functions. However, it shares this responsibility with development teams and business units. Shared responsibility for tasks is a recurrent theme in participants' reports.

The PMO makes use of training and mentoring to increase the competence of the personnel and guarantee that the organization has the best tools to shape itself to its needs.

The agile scope of the PMOs this study observed concentrates on the functions of the groups "Monitoring and Controlling Project Performance" and "Development of Project Management Competencies and Methodologies. "The PMO performs these functions in all four basic roles. The account of the respondents resembles the diagnostic and interactive control systems. There is a distribution between administrative and knowledge-based work among the function the PMO performs.

4.4.2 RQ4 - How is the de facto role of the PMO in organizations which have implemented Agile methodologies different from their past role under traditional methodologies?

The redistribution of the responsibility of tasks to the teams causes a reduction in the scope of the PMO when contrasting the traditional practices with the Agile ones. The shift from a predominantly controlling profile to a supporting and serving profile illustrates the different position of the PMO and the less direct way the PMO performs functions in agile. Under PRINCE2 and PMBoK, the PMO is an artifact in stage-gate processes and holds soles responsibility for project information management. Under agile, the teams have the autonomy to make their own decisions on, among others, their ways of working, measuring progress, reporting results.

4.4.3 RQ5 - What patterns emerge from the change in the PMO's roles and their organizational context?

Under Agile, there is a clear trend on the PMO, assuming a supporting and serving role in contrast to a controlling one. As observed before, this is most likely a result of the autonomy given to development teams and business units and the increasing use of automated systems for control intensive and administrative tasks.

The acquired freedom teams have on the ways they organize their work and how they track their performance causes friction when the interdependency between different team grows. The complexity of coordinating the delivery of a large number of development groups leads to the emergence of a need for an orchestration structure. Such structure is not often part of the agile designs the cases in this study chose to implement. The respondents point that it becomes part of the PMOs scope, much like it was in the traditional practices. The PMO, then, incorporates functions that help to steer the teams and conciliate interdependencies.

None of the PMOs in the study seem to have achieved a definitive configuration as their functions continue to change. The respondents from Case A, based on their past experiences, do not expect it to stop changing. The respondents of case D indicate that the rate of change inside the firm increases because of the agile practices. The agile standards are incomplete and ambiguous; as a result, implementation follows a trial and error approach.

5 Discussion

The previous chapter highlighted the main findings of this research and presented the results in the order that the questions were proposed to build structure logically. It began exploring how PMOs conduct their roles in practice within agile environments. Then it proceeded to discuss the differences in the role in traditional and agile contexts. It ended with an indication of possible patterns observed in the process.

The study gathered data from semi-structured interviews. The choice of this method is in line with the exploratory nature of this study and well suited for the broadness of the topic at hand. As chapter 2 highlights, there is not a single way of describing the PMOs. The participant's accounts translate this fact on personal descriptions and anecdotes to explain the role of the PMO in the firm. Chapter 4, therefore, is the outcome of an analytical process of relating the inputs from the interviews to the taxonomy framework proposed in Chapter 2 and extracted meaning and common themes from the testimonies. The intent of identifying patterns in PMO's roles was to provide a clearer understanding of the effects of agile on these roles and reduce the uncertainties associated with the change. Ultimately leading to better planning and designs on an agile transition and whether a transition is the best alternative.

The findings of the research indicate that a significant share of the functions and basic roles that compose the scope of the PMO with the introduction of agile are related to the decentralization of responsibilities, the increased autonomy of teams, the automation and simplification of processes, and the new need for coordination. This chapter positions the research on the overarching literature addressing the implications of the study to Accenture.

This chapter is organized as follows. Section 5.1 enumerated and discusses the results presented in Chapter 4 and compares them to previous publications. Section 5.2 positions the scientific contribution of this study in the overarching literature. Finally, section 5.3 discusses the implications of the findings to science, Accenture, and PMO professionals.

5.1 Main findings and connections to previous research

This section presents the main results of Chapter 4 and their resemblance to previous research on the PMO. Table 14 summarizes these similarities.

The study observed that the PMOs differ considerably between and within cases. A taxonomy framework proposed in Chapter 2 was used to describe each PMO and compare them. The study found that different organizational contexts yield particular PMO configurations and roles. Previous research observed that the PMO is a context-specific construct (<u>Müller et al., 2013</u>) or a problem specific construct (<u>Pellegrinelli & Garagna, 2009</u>).

Further, <u>Aubry, Müller, et al. (2010)</u> suggest that there is some amount of mimicry on implementing a PMO. Their observations indicate that upper management instructs the project organization to institute a PMO without a clear image of what to expect from the construct. So the PMO is mimicked for other firms at first and then adapted to the organization's needs. Although this study did not gather information on the formation of the PMOs in each case, this explanation helps understanding why the various distinct constructs in each firm are called a PMO, and respondents naturally address them as such.

The study observed that PMOs changes when the organization transitions from a traditional to an agile environment. There are at least two explanations for this change. The first one is related to the effects of agile in the firm and the PMO. The second is related to the dynamic nature of the PMO. In agile, the development teams gain an increased level of autonomy. The teams become actively responsible for tracking their progress and determining how to conduct their work. This institutes a heterogeneous landscape to the development organization, and, in response, the PMO's work adapts to each actor's practices. <u>Aubry, Müller, et al. (2010)</u> observed a pattern of the PMO's change based upon the level of project management standardization. In their discussion, the PMOs assume a more flexible approach and apply standards depending on the type, risk, and complexity of projects. The authors acknowledge that the change could follow a company-wide shift in management methodologies and increase the service nature of the PMO's job. The change observed in the cases discussed in this thesis fits this pattern. The study found that the PMOs assume supporting and serving roles in agile environments more often than in traditional settings.

Other authors have documented that the PMO is continuously changing (Bredillet et al., 2018a; Giraudo & Monaldi, 2015). Firms establish PMOs to answer a need. Once the need is solved, the PMO is reconfigured to address a different need or dissolved (Bredillet et al., 2018b; Hobbs & Aubry, 2010; Pellegrinelli & Garagna, 2009). The interviews conducted in this study indicate that the process of addressing the need entails in adaptations of the PMO on a trial and error basis. Other parts of the firm may undergo adjustments at the same time, but were not the focus of this thesis.

In parallel, this study confirms that the controlling role is predominant in traditional contexts (<u>Müller et al., 2013</u>). Moreover, although there are changes in the overall role of the PMO, the set of functions they perform remains relatively constant. As <u>Pinto and Ribeiro (2018)</u> concluded, the changes are related to the way the PMOs conduct their activities. This study captured this nuance with the concept of basic roles and the reported representativity of each function in the PMO's scope.

This study observed that there is an emergent need for structure post agile implementation. Although some standards prescribe a coordination structure to orchestrate different teams working with agile methods, the companies in the cases discussed in this thesis did not start their agile transition with these standards. The agile adoption begins with a few teams experimenting with the agile principles, and there is cadential dissemination of the practices to other teams. This growth of groups running under agile methods happens even if the decision to transition to agile is top-down. The need for coordination occurs due to the imbalance between a large number of agile groups working with different sets of practices, tracking different performance indicators, and the compliance requirements to external regulation, upper management requests for comparable and aggregated performance reports. Other authors have associated the PMO with reducing the costs of designing the same processes repeatedly (Aubry, Müller, et al., 2010), managing knowledge (Müller et al., 2013), and bridging the coexisting agile and traditional groups in a firm (Power, 2011). This study's findings suggest that in practice, this is an acquired function of PMO instead of a designed one in agile.

Finally, this study observed that the simplification of processes seems to be central to the redistribution of roles in agile environments. It can take place as a redesign of processes or by introducing software that bridges the processual knowledge barrier. According to the respondents, the redistribution of controlling and reporting activities result from the adoption of these tools. <u>Stettina and Schoemaker (2018)</u> found that as the adoption of agile grows in the firm, software tools that automate reporting routines become critical for the coordination of work across a portfolio. The findings of this thesis are in line with their observations.

Table 14 - Similarities with previous research

	<u>Artto et al. (2011)</u>	Hobbs and Aubry	Giraudo and	Bredillet et al.	Bredillet et al.	<u>Aubry et al. (2007)</u>	Pellegrinelli and	Müller et al.	<u>Aubry, Müller, et</u>	Power (2011)	Pinto and Ribeiro	<u>(Andersen et al.,</u>	Kerzner (2003)	Aubry, Hobbs, et	Salameh (2014)	(Stettina &
The PMO is a context- specific construct							Х	Х								
The PMO has a predominantly controlling character in traditional Methods								X								
The PMO adopts supporting and serving roles.	Х										Х					
The PMO is continuously changing			Х	Х	Х	Х	Х		Х							
There is an emergent need for coordination						Х		Х	Х	Х						
The functions of the PMO	Х	Х		Х			Х					Х	Х	Х	Х	
Automation of reporting routines and simplification of processes enable the redistribution of responsibilities																Х

5.1.1 The PMO description framework

In Chapter 2, this thesis discussed the literature describing the role of the PMO. The chapter closes with the introduction of a taxonomy framework to guide the analysis conducted in this study. The framework was a result of the literature research conducted to answers the first two research subquestions "How does literature describe the PMO in traditional and agile approaches?" and "How do traditional and Agile standards describe the PMO?". The literature research identified that there is not a unified taxonomy to describe the PMO. This study opted for proposing a taxonomy framework that would contemplate previous publications while reducing the overlap between the concepts that different authors discuss.

The framework used the function elicited by <u>Hobbs and Aubry (2007)</u> and extended the list with other potential attributions of the PMO found in other sources. Besides the list, the frameworks propose a group of four roles the PMO assumes with each function. The framework allows for the description of the PMO in detail. It can describe trillions of combinations with the thirty-six functions and four basic roles.

The framework served its purpose. It described the PMO, allowing the detailed characterization of the PMO in the agile and traditional periods. The application of the framework provided evidence for the change of the PMOs' roles due to the adoption of agile. However, the level of detail was excessive for the small sample of cases this study analyzed. As a result, the statistical analysis of the findings was not possible.

The shortcoming of this framework is that the list of possible functions of the PMO used in this study is not guaranteed to be the complete set of functions a PMO could have. Nevertheless, it is the most comprehensive one elaborated by the time of writing.

5.2 Contributions to science

Table 15 summarizes the contributions discussed previously. The exploratory nature of the research and the methods chosen resulted in the support and extension of previous work done on the topic.

Table 15 - Main contributions of the research

CONTRIBUTION	EXISTING LITERATURE	RESEARCH FINDINGS
SUPPORTING	Functions of the PMO (Andersen et al., 2007; Artto et al., 2011; Aubry, Hobbs, et al., 2010; Bredillet et al., 2018a, 2018b; Dai & Wells, 2004; Desouza & Evaristo, 2006; Hobbs & Aubry, 2007; Kerzner, 2003; Pellegrinelli & Garagna, 2009; Power, 2011; Salameh, 2014; Thiry & Deguire, 2007)	Empirical evidence of the various functions assumed by the PMO in both traditional and agile methods.
	The PMOs are actors capable of change. (Aubry et al., 2007, 2008; Bredillet et al., 2018a; Hobbs, Aubry, & Thuillier, 2008; Pellegrinelli & Garagna, 2009)	The PMO continues to change after the introduction of agile
	The PMOs assume serving and supporting roles as the responsibility of function lies with development teams when performing these functions (Hodgkins & Hohmann, 2007; Kulak & Li, 2017; Power, 2011).	Empirical evidence that the PMOs assume serving and supporting roles due to the decentralization of responsibilities.
EXTENDING	Previous research attempts to describe the PMO using different approaches.	This study proposes and applies a comprehensive taxonomy framework for describing the PMO conciliating publications from the existing literature.

5.3 Implications of the study

The findings in this study help on the understanding of how agile methods impact the role of the PMO. This section discusses these findings' implications.

5.3.1 Implications of the study to Accenture

Accenture uses PMOs in three forms: as a component, as a service, and as a design. First, it staffs PMOs in internal projects and projects sold to clients. Second, it outsources the services of PMOs, providing people to occupy this position at client firms. Third, it designs organizational structures that sometimes employ PMOs. The objective of Accenture on collaborating with this study was to explore the use of

the PMO in firms that have implemented agile and compare with the portfolio of PMOs Accenture offers (component, service, and design). Their motivation lies in the lack of documentation of the role of PMOs in agile and their underlying perception that firms can benefit from the use of a PMO regardless of project management methodology.

The direct implication of this study for Accenture is the recommendation of further investigation. The approach taken in this study did not attempt to test the underlying perception of the value a PMO adds to a firm but to explore its configurations and effects of agile. In this sense, the study has not found specific patterns that lead to immediate courses of action. Instead, it confirms claims of previous research on the specificity of the PMO's design to the context surrounding it. Despite the clarifications brought by the findings of this study, the effects of agile in the role of the PMO remain nebulous and unclear in the sense that there is still no theoretical explanation.

As a result, there is no standard process for designing a PMO that will suit every client. In hindsight, this is good news for Accenture. Accenture already these products in a bespoke fashion now, and the firms in the market seem to do it the same way. Furthermore, this study provides recommendations for further research that move the understanding of the roles of the PMO forward.

It seems that the trend to the PMO is to concentrate on supporting and serving roles, standardizing processes without enforcing their mandatory adoption. This approach gives the development teams enough freedom to be innovative and flexible as agile proposes while preventing wasteful expense in "reinventing the wheel" each time some routine needs standardization. The findings of this study seem to indicate that the firms with a large number of teams working in agile will have a greater need for a coordination structure. Therefore they will constitute the most promising market for the PMO related services Accenture offers.

5.3.2 Implications to professionals in the PMO

The PMO has a paradoxical nature in the sense that by achieving its goals, it becomes redundant. PMOs overcome their short average life span by changing focus as each problem gets solved or as the organization changes.

This study finds that PMOs change with the introduction of agile methods. From a change management perspective, this has an impact on professionals working as part of the PMO and with the PMO. The PMOs that participated in this study embraced the change; one of them championed it. By being directly involved in the transition from the beginning, the professionals in the PMO can readapt their scope to the firm's new needs faster. They can also benefit from a stronger position as a knowledge broker and enlarge their network within the firm.

5.3.3 Implications to scientists

This study employed considerable effort to research the roles of the PMO systematically. The first challenge addressed to this goal was the problem of finding the words to describe the PMO. The name hypernym refers to different entities that are usually discussed collectively in literature. The PMOs covered here have similarities, but they also differ considerably. The framework this thesis proposed to describe the PMO allows for a detailed assessment. However, it does not suggest a minimal set of functions a PMO should have. There are a few limitations and shortcomings of this study that yield recommendations for future work. The next chapter discusses them.

5.4 Author's Impressions and interpretations

The process of conducting and analyzing the interviews and attempting to identify possible patterns in the data results on a set of hunches and explanations that are not fully supported by the findings. This section exposes the author's opinions and interpretations of the outcomes of this study. Perhaps further research could assess whether these impressions hold.

There is a reduction of scope on the activities of the PMO and a change of the Basic role the PMOs perform after the introduction of agile ways of working. The participants indicate that reduction is possibly a result of the redistribution to the agile of tasks initially attributed to the PMO. Agile control processes are more straightforward than traditional ones, and software design to manage agile projects is more user-friendly to non-project manager staff than conventional software. It is the author's impression then that the simplification of controlling processes and dependent on semi-automated reporting tools enable the redistribution of tasks.

The introduction of agile is often not an organized process; the organic spread of agile methods results in a heterogeneous landscape of project management practices across teams, which increases the complexity of inter-team cooperation. The complications of this complexity arise in the interfaces between agile and traditional groups. To mitigate issues in the dependencies between these teams, firms recur to PMOs for their expertise on managing stakeholders with diverse agendas. In this context, it becomes one role of the PMO to act as a bridge between the different project management methodologies and coordinates the work between the multiple agile practices across teams.

The difficulties this study had in demarking a precise moment in time where the transition to agile is past could mean that there is no moment of change. Instead, there is a period during which the shift happens that has no defined beginning and end. Therefore, there is no reason to believe that other organizational changes will happen chronologically after the adoption of agile. Rather, they will happen alongside. This interpretation relates to a perception of an ever-changing nature of things, under which the roles of the PMO would be dynamic and continuously changing.

Although appealing to imagine, this study does not confirm these thoughts. It is the author's intuition that suggests that this narrative may be factual but require further research.
6 Conclusion

The main objective of this thesis was to explore the impact on the roles of the PMO of the introduction of agile in several teams. The idea is that by exploring the theme, the study would be able to formulate a hypothesis that future studies could test on how the roles of the PMO change and help businesses to better prepare for an extensive transition to agile. The motivation for this study is the lack of consensus in the roles of the PMO across project management methodologies, but especially in agile methods. As a result, firms create a PMO without a clear view of how to design the PMO to achieve the expected goals. PMOs are an ambiguous entity that is associated with better project performance while surviving an average of two years before dissolution.

This study proposed the research question "How do the roles of Project/Program/Portfolio Management Offices change with the introduction of Agile methodologies to a large number of teams?" to address the knowledge gap on the changing roles of PMOs with agile. The research question was broken down into five subquestions.

- 1. How does literature describe the PMO in traditional and agile approaches?
- 2. How do traditional and Agile standards describe the PMO?
- 3. How is the role of the PMO conducted in practice in organizations that have implemented Agile methodologies?
- 4. How is the de facto role of the PMO in organizations which have implemented Agile methodologies different from their past role under traditional methodologies?
- 5. What patterns emerge from the change in the PMO's roles and their organizational context?

Chapter 2 pursued the answer to the first two questions through a systematic literature study covering publications in traditional and agile methods, and a review of the principal available standards. This study observed that the PMOs' roles vary; they are path-dependent and in constant change. As a result, there is no unified terminology to describe the PMO, which makes this task challenging. Different authors use similar terms with different meanings, and analysis often relies on abstract and subjective perceptions. The specific literature on the PMO in an Agile context does not build much further than the pre-existing general research on the PMO.

To overcome the description problem, this thesis proposed a taxonomy framework to objectively describe the PMO and analyze the changes of roles due to agile. The framework, available in Figure 1, uses a combination of thirty-six functions and four basic roles to explain the mandate of the PMO. This study applied this framework in four cases. The data collection in the case studies was conducted through semi-structured interviews and surveys with nine respondents, two per case, and three in one case. The survey was the source of the quantitative data used in the analysis, and the interviews' transcripts, the qualitative data.

The application of the framework captured detailed insights n the case and possibilities the mapping of the PMO roles before and after the introduction of agile. The main results of this study are the following:

- 1. There are significant differences between PMOs from different companies
- 2. The data analyzed from the cases in this thesis indicates that the changes in roles of the PMO between the traditional period and the agile periods are related to the introduction of agile, although this study did not establish a causation relationship.
- 3. The PMO remains a crucial piece in the functions listed in the groups "Monitoring and Controlling Project Performance" and "Development of Project Management Competencies and Methodologies."
- 4. The change in the roles of the PMO is a reduction of the overall scope of the PMO and a shift from a predominant controlling role to a supporting and serving role.

While answering questions 3, 4, and 5, this study confirmed the observations of previous research on the diversity of PMO designs; it observed that the PMOs change as a result of the introduction of agile and that the governance and control are essential attributions of the PMO. The PMO's descriptions given by participants vary considerably from case to case and within cases. However, there are some similarities in the different reports.

The agile scope of the PMOs this study observed concentrates on the functions of the groups "Monitoring and Controlling Project Performance" and "Development of Project Management Competencies and Methodologies." The PMO performs these functions in all four basic roles of the model. The PMO is strongly related to reporting, governance, and risk management functions, It shares this responsibility with development teams and business units.

The difference between the PMO in traditional and agile environments lies in the PMO's reduction of scope due to the autonomy development teams gain, and the simplification of management processes. The PMOs shift from a predominantly controlling profile to a supporting and serving profile. The PMO remains a crucial piece in "Monitoring and Controlling Project Performance" and "Development of Project Management Competencies and Methodologies." but the standards are flexible, and there is less emphasis on enforcing them.

The acquired freedom teams have on the ways they organize their work and how they track their performance causes friction when the interdependency between different team grows. The complexity of coordinating the delivery of a large number of development groups leads to the emergence of a need for an orchestration structure. As most agile standards do not include this structure, the PMO incorporates functions that help to steer the teams and conciliate interdependencies.

The modernization of software tools that make knowledge sharing more accessible and automate control intensive and administrative tasks seems to enable the distribution of responsibilities from the PMO to the teams. Although this factor is not directly related to agile methodologies, it was not possible to separate it from the overall phenomenon. The different agile standards propose their set of artifacts and rituals related to knowledge management and communication. It seems that software developers have caught up with the trend to adopt agile and provide firms with the products that fit these artifacts' purposes in such a way that the use of non-digital alternatives is seldom.

6.1 Limitations

Section 1.3.6 discusses the limitations of the methodology proposed, which is reiterated here. Previously it was stated that separating the effects of the agile transition from other organizational changes could be challenging if not impossible. This has proven to be true. The effects of automation of processes organization-wide could not be isolated in the observations. On the other hand, this study perceived automation as being a complementing change to the agile transition.

It has also been previously stated that participants could be confused while remembering events so far apart. This study attempted to mitigate this risk by interviewing multiple participants in each case and using a survey to guide participants on the process.

For privacy reasons, the study had no access to any documentation that could help further substantiate the findings in this research. This risk was identified previously, which has been proven true and was not mitigate.

This study is limited by its scope. It only investigated firms that had a PMO after the introduction of agile ways of working. By doing so, it neglected the knowledge the firms that have abolished the PMO could provide to the understanding of the PMO. Ceasing to have a role is a change in roles.

Also, the author recognizes two other limitations of this study. First, the sample is too small to establish the statistical significance of the observed conclusions. The studies that attempted to do so resorted to massive scale surveys. A resource that was never available and never was it procured to this work. Second, the research designed assumed that there would be two identifiable periods of before and after the agile transition. Although the aspects of each were expected to overlap during the transition period, to mitigate this, the study chose companies that declared to be working with agile methods stably. All the cases have started transitioning longer than four years before the study. Surprisingly, a pattern observed across cases was of ongoing change. To which there are two interpretations. First, agile methods get incorporated into the corporate culture and accelerate the rate people experiment with new ways of working. Second, it is in people's nature to improve their environments and quality of life. Regardless of project management standard or management methodology, people will always strive to improve, and the change is always constant.

6.2 Recommendations for future work

All topics addressed in this thesis are extensive: the PMO, project management, agile methodologies, and traditional methodologies. At several points on the design and development of the research, this study made choices to define the scope. Although it was not possible to address all fronts, the author offers this section to recommend future work following the efforts presented in this document.

This work is exploratory and gives insights on what are the changes to the role of the PMO. There are three natural extensions to this effort; the first one is to explore the impacts of agile in other positions of the organization associated with traditional project management. The findings in this research indicate that not only the PMO responds to the changing environment in the firm, but other actors in the network would react to it as well. This branches to further questions such as: How do the socio-political structure of the firm shapes organizational change?

Second, while other studies have investigated the patterns in which the PMOs change (not restricted to agile), this study attempted to identify patterns that emerge specifically when the PMO changes due to the introduction of agile. This research has illustrated how vast and ambiguous the PMO and organizational change topics are. The overarching theme of this study lies in the hybridization of management methodologies. The fact that the PMO remains in this hybrid construct of agile and traditional methods cannot be said to be good or bad. Partly because of the very context-specific situations addressed, partly because there is no way to assess if an organizational construct is completely good or bad. Instead, it is good or useful for some purposes and bad for other purposes. This study did not reach a robust assessment of why and to whom the structures described here are better or worse. Although the testimony of most participants advocated for the improvement the new format represents, the research conducted here did not assess it. Therefore, there remain the questions: "To what ends do the choices made during the transition to agile serve?" or "Which processes or structures improve with the new form of the PMO in agile?"

Third, one of the limitations of this study was the choice of firms that have maintained a PMO after the introduction of agile ways of working. Further research can extend this scope observing firms that have eliminated the PMOs and investigate the patterns that lead to this choice. Ceasing to have a role is a change in the PMO that may be just as enlightening as the patterns observed in this study. Answering the question "Which factors influence a firm's decision to disband a PMO?".

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The changing roles of the PMO with the introduction of agile

Exploratory multiple case study

Abstract

Authors associate the PMO with an increase in the success rate of projects, reduce overall costs, and delivery time. Which explains why firms replicate and modify it while adopting project-based structures and strategies. PMOs in different organizations hold little similarities with each other. Staffing the PMO is an overhead cost to projects, and seeking to optimize resources organizations tend to allocate more functions to them. As a result, there is a broad range of activities a PMO can perform. This study found in literature 36 different functions associated with this structure.

Agile and traditional project management methodologies have fundamental differences in both planning and operational organization. Agile argues that overhead costs, requirements elicitation, and planning processes result in overspending and delaying innovative product development. These differences conflict with previously established roles, functions, and, more problematically, the people that perform them. In this sense, the introduction of agile ways of working is a disruption of traditional practices in the organization.

The change to agile methods has effects of various aspects of a firm's organizational structure, including the PMO, a symbolic figure from traditional project management. Agile standards have different approaches to the use of a PMO, and it is not clear whether the PMO in agile has similar roles and responsibilities as the PMO in traditional methodologies.

This study proposes to investigate the impact of the transition from traditional project management to agile on the PMO to address this gap. The main research question makes it explicit: *"How do the roles of Project/Program/Portfolio Management Offices change with the introduction of Agile methodologies to a large number of teams?"* This study adopted a descriptive exploratory approach to answering this question.

The study observed the changes in the roles of the PMO before and after implementations of agile with four case studies. The research conducted semi-structured interviews and applied surveys with nine professionals in these different companies. The contribution to science of this study is twofold. First, it contributes to the description of the PMO, enriching the field towards a unified theory of project management. Second, it provides empirical evidence for the changes in roles of the PMO with the introduction of agile.

This study found that there are wide disparities between the roles of the PMOs in different organizations. It also found that PMO performs different functions before and after the introduction of agile methods in a firm. It seems to be consistent that the PMOs are involved in the activities of monitoring, controlling, and standardizing project methodologies in both periods. A common theme across the participants' reports is that the PMOs participation got diminished or repurposed to a supporting and serving role with the introduction of agile. An explanation for this change is the shared responsibility the PMOs have with the agile teams on processes they were the sole or main responsible in traditional settings. Another common theme is the interfacing part the PMO plays, bridging

traditional sectors and agile sectors of the firm. Participants in all firms believe the current state of the PMO is not final and expect it to continue to change.

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Keywords: PMO; Agile; Case Study; Exploratory

1 Introduction

Agile methods became the project management standard in the software industry. The fast innovation rate of this industry fueled the competitive pressure of releasing new products faster and be flexible to adapt to the changing market demands. Other sectors are subject to similar forces as their workforce becomes increasingly digitalized, and their segments globalized (<u>Barabasi & Frangos, 2002, pp. 199-218</u>; <u>Kettunen et al., 2019</u>). As a result, the adoption of agile (<u>Conforto et al., 2014</u>) or some hybrid form of agile (<u>Cooper, 2016</u>) has been suggested or studied for other industries than software development and information systems technology.

Pure implementations of standardized agile frameworks are rare (Noll & Beecham, 2019). The PMI institute report that 23% of the 2018 respondents employ a hybrid, compared to 30% claiming to use agile (Project Management Institute, 2018). The process of changing the project management structure of a stablished firm usually encounters resistance (Cooper & Sommer, 2016). The use of hybrid frameworks could be a mitigation strategy to reduce this resistance. Some authors argue that agile cannot sustain multiple projects or large enterprises without incorporating traditional elements (Gill et al., 2018), and some argue that traditional and agile hybrids result from the skepticism of upper management. Nevertheless, it is not rare to find large firms with several agile teams and traditional project managers, project sponsors, and PMOs. However, it is not clear whether these roles remain the same or whether they change with the introduction of agile.

This study focuses on the PMO. Although the phenomenon of resisting change is a well-documented topic (<u>Armenakis et al., 1993; Coch & French, 1948</u>), the cover on the effects of agile on the PMO is not extensive. Authors investigate how the PMO can aid the transition to agile (<u>Hodgkins & Hohmann, 2007</u>), how the PMO should be in an agile environment (<u>Elatta, 2012</u>; <u>Pinto & Ribeiro, 2018</u>) and experience reports of establishing PMOs (<u>Tengshe & Noble, 2007</u>), but there are very few publications that observe existing PMOs in agile.

This study investigates if and how the roles of the PMO change with the introduction of agile to a large number of teams. Accenture motivated the choice to analyze the PMO. Accenture provides an extensive portfolio of consulting services that include planning and conducting agile transitions, coaching teams in agile practices, outsourcing project managers, PMOs, scrum masters, among others. Accenture was interested in the interface between PMOs and agile. This study, therefore, was initially motivated by the company's demand.

The Project Management Institute (PMI) defines the PMO as: "A management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques" (Project Management Institute, 2017, p. 40). In practice, PMO is a hypernym that can stand for program, project, or portfolio management office. Other names for the PMO include supporting office, center of excellence, and project office.

There is documentation associating the PMO with project success, and its responsibilities range from risk management to administrative support, but there is a wide disparity between the descriptions of the PMO in the different studies and cases. This variety may indicate a gap of knowledge in the literature on identifying the roles of the PMO in agile environments. Especially on providing theoretical explanations on how a firm transition to agile impacts these roles. This gap is discussed later in this section. To address it, this study focusses on the role and responsibilities of the PMO on firms who have implemented agile methods in their IT organization within more than ten teams (Dingsøyr et al., 2014). In the cases this study explores, the core business is not software development. However, the IT organization is critical.

This study conducted an exploratory research approach to answer the main research question. It pursued descriptive qualitative research with a grounded theory overtone using semi-structured interviews and surveys with nine professionals in four large firms (Corbin & Strauss, 2015; Sandelowski, 2000). This study did not reach a hypothesis formulation. Its contribution to science is twofold. First, it proposes a taxonomy framework that contributes to the description of the PMO, enriching the field towards a unified theory of project management. Second, it provides empirical evidence for the change in roles of the PMO with the introduction of agile.

This study found that there are wide disparities between the roles of the PMOs in different organizations. It also found that PMO performs different functions before and after the introduction of agile methods in a firm. It seems to be consistent that the PMOs are involved in the activities of monitoring, controlling and standardizing project methodologies in both periods. A common theme across the participants' reports is that the PMOs participation got diminished or repurposed to a supporting and serving role with the introduction of agile. An explanation for this change is the shared responsibility the PMOs have with the agile teams on processes they were the sole or main responsible in traditional settings. Another common theme is the interfacing part the PMO plays, bridging traditional sectors and agile sectors of the firm. Participants in all firms believe the current state of the PMO is not final and expect it to continue to change.

Although enlightening, this study cannot claim statistical significance in these results. The sample is too small to be representative of the universe of PMOs in firms that have agile teams. The study observed similarities between cases, but also just as many distinctions. The common themes are sparsely present within a wide range of dissonant accounts. This study argues that the PMO is a context-specific entity but falls short from proposing a hypothesis that could explain the similarities and differences observed.

This document is based on the author's master thesis research. The research was conducted for the fulfillment of the requirements of the program Complex Systems Engineering and Management at TU Delft. The research was conducted as an internship at Accenture B.V.

Reading guide

This document reads as follows. Section 2 presents the literature review of this research. It serves as a base for the development of the interview protocol as well as the following interpretations. Section 3 presents the process used to collect data and describes the cases analyzed. Section 4 presents the results of the interviews. And Section 5 concludes this document positioning this study in the overarching scientific literature along with recommendations for future explorations.

2 Literature review

Defining the PMO is no easy task, and even though there has been considerable effort carried by several different authors, there isn't a unified taxonomy to date. Just as there is no singular description of the responsibilities of a PMO and the activities it performs (Desouza & Evaristo, 2006). This chapter presents the current status of research on the PMO. This research conducted a systematic literature review. The search contemplated peer-reviewed publications and yielded 3432 documents. The list was filtered to eliminate the usage of the acronym in other subject areas, following by a title and abstract scanning and reading of the remaining publications. Finally, the results were narrowed down to 21.

The findings of the literature research were contrasted with the standards behind the main large-scale agile methodologies as well as the main traditional standards. The traditional standards investigated were the PMBoK, PRINCE2 and ISO21500:2012. The study explored the agile standards described in the report State of Agile (<u>VersionOne, 2019</u>). The report is the longest recurring survey on industries' agile practices. This 13th annual edition collected data from over a thousand full responses from different organizations.

The literature study found 36 functions usually associated with the PMO, and 4 basic roles PMOs (coordinating, controlling, supporting, servicing) assume when performing tasks associated with those function. Overall, the literature is vague when describing factors that could make role transitions explicit. However, a shift from controlling to supporting and coordinating seems to be a common theme both in academic and trade literature.

The literature on the PMO

The landscape of academic literature on the PMO is mostly concentrated on exploratory research. The scope is diverse in several aspects with some addressing the task profile of PMO activities, some addressing its functions, some addressing its roles in an organization and some attempting to devise types of PMOs. The aim studies take also vary between studies that attempt to make sense of PMO transformations, studies that attempt to model or propose ideal PMO models and studies that evaluate current designs and their impact on project performance. The studies mentioned propose their own definition of PMO characteristics or build upon other author's definitions. It is worth mentioning that many authors use the definitions of professional sources or refer to other author's proposals, these were not included in this review (Lavoie-Tremblay et al., 2012; Too & Weaver, 2014).

Attempts on defining the role of the PMO take several twists and turns. Authors <u>Thiry and Deguire</u> (2007) argue that a successful project-based organization is vertically integrated through competent portfolio management and horizontally integrated through program management. In their framework, the PMO stands for program management office has the role of bridging Leadership and policies into processes and procedures. Much like the organizational model proposed by <u>Aubry et al. (2007)</u>.

On the diversity of roles, <u>Hobbs and Aubry (2007, p. 85)</u> observe that "organizations establish a great variety of different PMOs to deal with their reality". The authors also mention that the PMO is short-lived in most of the companies evaluated in the study, with an average age of 2 years before dismantling or transformation. This could be explained by the changing nature of the PMO and the underperformance of young PMOs. Although PMO functions are associated with better project performance, there is a learning curve (<u>Dai & Wells, 2004</u>).

The roles of the PMO

The definition of the role is broad, and somewhat overlapping with that of functions. In psychology, role is defined as a set of behaviors, rights, responsibilities, beliefs and norms an actor expresses or is expected to abide in a social situation (<u>Biddle, 1986</u>). However, role can also be defined as "the function that somebody has something has or the part somebody/something plays in a particular situation" (<u>Oxford Learner's Dictionary, 2019</u>) <u>Aubry and Hobbs (2011)</u> use the functional approach for roles. In the present study, both terms are separated by a level of abstraction. Functions being deemed as closer to operational tasks than the roles presented above.

The PMO is often an entity outside the largest divisions of the firm while maintaining interface with a number of different actors within and outside a firm (<u>Müller et al., 2013</u>). As a result, the PMO assumes multiple roles in a company and these roles vary considerably across businesses (<u>Aubry & Hobbs</u>, <u>2011; Hobbs & Aubry, 2007; Müller et al., 2013</u>). The most common types of PMO roles in literature are: coordinating, supporting, and controlling.

The **coordinating role** is more likely to be present in PMOs that manage multiple projects, a or some programs and portfolio ($\underline{\text{Too & Weaver, 2014}}$). It is the role assumed by the PMO when conducting resource management functions and mediating stakeholders ($\underline{\text{Unger et al., 2012}}$). Associated with this role are functions like resource allocation and mediating conflict.

The **controlling role** is associated with the traditional command and control style of management (<u>Nerur et al., 2005</u>). PMOs assume this role when enforcing project management standards, guaranteeing projects compliance with internal and external regulations and evaluating project performance. In this role, the PMO contributes to increasing transparency and stabilising an information system (<u>Müller et al., 2013</u>; <u>Unger et al., 2012</u>).

The **supporting role** is the role the PMO takes when it facilitates knowledge transferring between projects and teams and develops and maintains project management standards, for instance (<u>Unger</u> et al., 2012).

The **serving role** is the role the PMO takes when it provides services to other units. Be it by conducting training, consulting and administrative functions or specialized tasks. (<u>Müller et al., 2013</u>)

<u>Artto et al. (2011)</u> discuss the integrative role of the PMO, defined by interactive control systems and belief systems. Meaning that the PMO actuation is grounded on value-based influence in decision making on a different level of the company with a clear alignment with the firm's mission and vision. The authors, however, didn't observe any institution in this role. Instead, they showed that PMOs tend to exert their scope through formal control systems. As most of the interviewees have had a PMO for little time or the interviewees had short experience in the role, their argument concludes that with time the PMOs will transition to a Believe system or Interactive control system. The authors define four types of control mechanisms, suggesting that PMOs will benefit from migrating to a composition of the last two (integrative role):

Boundary Systems exert control by means of standardization and planning, limiting ways of working to pre-established agreements;

Diagnostic Control Systems relate to the most classic management approach of budget control, resource allocation and performance measurement;

Belief Systems direct portfolios, programs or projects through collective values and principles expressed in shared mission and vision;

Interactive Control Systems is a direct and personal influence of managers on the way tasks are conducted, this is done by frequent interactions formal or informal.

<u>Müller et al. (2013)</u> describe a Partnering role as "[the] PMO takes on a partnering role when it engages in equal knowledge sharing, exchange of expertise, lateral advice-giving, and joint learning with equal level stakeholders" (<u>Müller et al., 2013, p. 61</u>). The authors acknowledge the lack of coverage of this role in overall research. However, the proposed description resembles the serving and supporting roles mentioned above.

A complete understanding of how the PMO works require a combination of variables and dimensions that goes beyond roles and control systems. <u>Desouza and Evaristo (2006)</u> devise a framework to define the PMO. The definition is grounded on the level of scope: strategic, tactical and operational. Each encompassing a series of characteristic tasks: project knowledge management, Project process and procedures, training, resource management, portfolio management financial management. The authors derive their knowledge archetypes based on a dual classification system: administrative and knowledge-intensive.

A full picture of the roles of the PMO is, therefore, subject to different dimensions. The role of the PMO is dependent on its levels of scope (strategic, tactical and operational) (Desouza & Evaristo, 2006), it's functions (Hobbs & Aubry, 2007), it's relationships with other units (Aubry & Hobbs, 2011; Aubry et al., 2007; Thiry & Deguire, 2007), it's types of control mechanisms (Artto et al., 2011) and the nature of its tasks (Desouza & Evaristo, 2006). The combination of these factors results in a wide variety of PMOs observed. Aubry et al. (2007) suggest that the inner link between the different compositions is the primal nature of the PMOs contribution to an organization. That of constant checks and balances pairing stakeholders competing values with projects, programs and portfolio management.

The functions of the PMO

Functions are extensively covered in literature and an important part of the PMO roles. Both the ones proposed by authors and the functions they observe encompasses different fields of expertise. The most comprehensive list is presented by <u>Hobbs and Aubry (2007)</u>. The authors identify 27 functions a PMO perform in their survey with 500 respondents. Table 5, in Appendix 1, summarizes the potential functions listed by <u>Hobbs and Aubry (2007)</u> and with the addition of contributions from other authors. Through a factorial analysis the authors group the functions in five groups, namely:

Monitoring and Controlling project performance – this group involves reporting to upper management, defining performance criteria, monitoring and controlling performance and managing the project's information system.

Development of Project Management Competencies and Methodologies - this groups relates to training, mentoring and coaching of project management professionals, defining project standards and spreading the firms' project management culture.

Multi-Project Management – this group relates to the management of the firm's portfolio, and it includes the allocation of resources among projects prioritizing the business strategic goals and orchestrating interdependencies between projects and programs.

Strategic Management – this group includes advising upper management, participating in strategic planning and stakeholder management.

Organizational Learning – this group deals with performance monitoring and control, project documentation, assessment, audition and cataloguing.

The literature specifically covering agile is far milder. Among the studies found there are single company reports. <u>Tengshe and Noble (2007)</u> describe the transition to agile of a firm in which the PMO performed training and coaching functions (functions 7 and 36) as well as creating their portfolio control standard (function 5). Scotland and Boutin [55] describe an ad-hoc hybrid agile implementation at "Yahoo!" demonstrating the roadmap of making traditional PMO and agile processes compatible. <u>Hodgkins and Hohmann (2007)</u> describe an institutionalization of a PMO performing backlog management (function 11) and stakeholder management (function 36) on a serving role.

On a similar note, <u>Power (2011)</u> describes the PMO at Cisco with the introduction of agile methods. The functions performed by the new institution include the development of standards (function 5), promoting agile within the organization (function 6) and training and mentoring personnel (functions 7 and 8 taking either serving or supporting roles. This apparent direction towards serving and supporting roles in agile is supported by <u>Kulak and Li (2017)</u>. The authors argue that in agile the PMO must fill a serving or supporting role avoiding diagnostic control systems and boundary systems.

<u>Pinto and Ribeiro (2018)</u> conclude that the PMO in an agile context is no different from the PMO in traditional methodologies regarding the functions that are performed. The differences, if any, are found on the way they are performed. That is, they differ in the roles assumed, the reach of their scope and their control mechanisms. Agile proposes control mechanisms relates to the definitions of belief systems and interactive control systems. The PMO associated with the functions of standardize work, centralize reporting, control project/program/ portfolio is linked with Boundary systems and Diagnostic Control systems. This explains why the institution of a PMO entity can incur in reducing the autonomy of different areas of the project-based organization (<u>Artto et al., 2011</u>). The PMOs in the studies presented here assume or are prescribed to assume serving and supporting roles when performing these functions (<u>Hodgkins & Hohmann, 2007; Kulak & Li, 2017; Power, 2011</u>). That is, the responsibility lies with the development teams and not directly with the PMO.

Taxonomy framework

This chapter discussed the literature available on the PMO extensively. Specifically, on the manner authors and standards address the role of the PMO. It proposed a terminology to discuss such roles that embrace the complexity of the topic (Figure 1)

There is no unified terminology to describe the PMO. Terms are sometimes used in contradicting ways by different authors, and analyses often rely on subjective perceptions of abstraction levels. This study proposed an analogy with the performing arts to describe the roles of the PMO. Figure 1 illustrates the terminology and framework this study devised from the available literature to describe the PMO. There are four basic roles (coordinating, controlling, supporting and serving) which can be assumed individually or in combination by the PMO when performing its functions. Some of these functions can be easily associated with control mechanisms such as the monitoring and controlling of project performance groups containing functions related to diagnostic control systems and project management competencies and methodologies group to boundary systems. However, the combination of the attributes to a full description of the role id most likely a context-specific phenomenon.

The specific literature on the PMO in an Agile context does not build much further than the pre-existing general literature on the PMO. This can be a result of the novelty of the theme that is yet to catch interest momentum. However, there seems to be a trend in the effects of agile on PMOs. Most frameworks advocate for a reduced expenditure of resources in planning, reporting and scheduling, all activities usually associated with the PMOs.



Figure 1 – Role Description Framework

3 Materials and methods

This study makes use of semi-structured interviews for collecting the data. The interviews were recorded and transcribed with the expressed consent of the interviewees. The contents were analyzed by creating a description of the cases and organizations, attributing codes to the transcriptions. The interviews, transcriptions and analyses were conducted by the author only between August and September 2019.

Case Selection

The object of study of this research is the PMO that oversees the largest aggregation level of projects and products on a financial sector organization. In this position, the PMO will have close links to the overall strategy as well as experiencing the impacts of agile. This study proposes the following criteria for selection:

- The organization has at least ten teams working with agile methods;
- The organization has a PMO and had a PMO before the agile implementation;
- The organization still has a PMO;
- The PMO in both cases is involved in all levels of product and project management;
- The teams work in projects with a strong IT focus;
- The organization has a significant part of its business in the financial sector.

The study resorted to Accenture's present and former clients and invited professionals directly involved with the phenomenon under observation. The invitations were sent to people who act or acted as a leader of the PMO, as a consultant in the transition to agile, as a member of the development teams or as the reporting point of the PMO. An initial list of 12 organizations was created, of which 6 were chosen to participate based on the availability for interviews. From these 6, 3 were included in this study due to the fit to the described criteria, knowledge of the processes involving the PMO by the participants, and completion of results.

Data collection

The semi-structures interview was chosen for this method allows for rich data systematic data. The interview remains conversational, which permits the researcher to dive deeper into different questions. This freedom helps the interviewer to clarify ambiguities that may arise on the spot. The flexibility is fundamental for an exploratory study. Based on the literature presented in section 2, a protocol for the semi-structured interviews was created.

Nevertheless, this study has shown how vast the topic of PMO is. And the timeframe most respondents usually have available may not be enough to cover the full extent of it exhaustively. Moreover, the inquiries proposed in this research often spans years and resorts to the memory of the participant for clarification. To both serve as a point of triangulation of information and circumvent the difficulties the interview format imposes, a survey was included in this research.

The participants were asked to fill in a survey at the end of the interview. The survey consisted of the list of functions in Table 4. The task consisted of ranking each task on a five-point Likert scale for both the periods before the agile transition and after. Where five indicates that the function is a defining aspect of the PMO. And 1, the function is within the scope of the PMO. However, it is not a significant part of the job. The participants were also asked to indicate which one of the basic roles (coordinating, controlling, supporting or serving) were taken by the PMO when performing them, again for both periods.

The interviews were divided into three segments. First, the research was introduced briefly, and the stated consent forms were collected. Second, the semi-structured interview was conducted and recorded. Finally, the candidate was asked to fill in the survey.

Data Analysis

The data analysis part starts with a full description of each case. It is followed by a full transcription of each interview and coding. Finally, the quantitative survey data was analysed. The interviews were coded on the platform Atlas.ti 8 using open coding, which gave a rich overview of the themes discussed by participants. The process of coding consisted of thoroughly reading all transcripts identifying relevant segments for analysis with an explanatory text. Whenever a new related topic was detected a new code was created. All sources were used collectively to form the narratives presented in this document. The research used inductive reasoning to identify patterns and common themes.

Case Description

The effort consisted of 13 semi-structured interviews with approximately 1h. The interviews were conducted either in the participants' offices or virtually with the use of Skype Broadcast. The interviews had the participation of the author and the participant only. In some instances, whenever the interview was conducted in a public area, other people may have been in the vicinity. However, there was no interaction with anyone else during the interview time.

Out of the 13 interviews conducted, 9 were used in the analysis. The remainder were disregarded wither due to incomplete data. One interview of Case A was used as a test to the process and excluded from the data. Table 1 summarizes the cases analyzed and excluded.

To ensure the validity of the findings and prevent respondents' biases, there was more than one interviewee per case with different experiences on the phenomena. Having different professionals describing the PMO enriches the analysis as the roles of the PMO are dependent on their relationship. (<u>Aubry & Hobbs, 2011</u>). Table 8 summarizes the cases analyzed.

Table 1 Case Summary

Case	Industry	Agile method	Agile Teams	Interviewees	Status
Case A	IT Department of a Financial Group	DevOps, Scrum, and Kanban	100	Agile Coach – 1 PMO manager – 1 Project Manager – 1	Included (Agile coach used as a test)
Case B	IT Organization of an Insurance Company	Scrum, Kanban, eXtreme Programming and SAFe	100+	Consultant - 2	Included
Case C	Financial Services	SAFe	1000+	Release Train Engineer – 1 Member of the PMO - 1	Included
Case D	Retail	Scrum, LeSS	10+	Consultant - 3	Excluded

4 Case Results and Analysis

This chapter will present the results of the interviews conducted on the three cases investigated. The results in this chapter were extracted from semi-structured interviews with 6 professionals in three companies. These interviews were conducted in July and August of 2019, and the author was present in all of them.

The role of the PMO under agile in practice

The PMO in an agile environment performs a broad range of functions. Among these functions, the group "Monitoring and Controlling Project Performance" ranks the higher on average across all participant's reports in the study. At least five participants, out of the nine included in this study, have graded all four functions in the group above three, and two have grades above 4. "Development of Project Management Competencies and Methodologies" and "Multi-Project Management" tie in second (Table 2). Both with three out of five functions graded above three by at least five participants and one above four. The Supporting role is the predominant role in the population. It was the most frequently attributed to eighteen functions, followed by the controlling role attributed most frequently to thirteen functions, the coordinating role, eight and the serving role to seven.

The respondents highlighted in the interviews the processes related to the "Monitoring and Controlling Project Performance" group as a fundamental aspect of the PMO. The PMO in agile environments is an external agent to the development and delivery teams in the case study. The PMOs are usually in charge of activities related to resource management, risk management, standardization of processes, reporting, compliance, and governance. The PMOs are also a bridge between the agile project organization and the traditional project organizations in the firm. All cases observed had agile and traditional practices coexisting. Reporting the development of agile teams to higher hierarchical levels using traditional processes is repeatedly a struggle that participants report. The PMOs perform all four roles (controlling, coordinating, supporting, and serving). However, the four cases at hand are very distinct from each other as it becomes clear from Figure 9.

Figure 1 shows the combination of functions and basic roles each PMO performs in each case in more detail. No two descriptions are the same, and the PMO's description varies between cases and within cases. There are specific facets in each of the analyzed reports, which may be a reflection of the

peculiarities of each project (or collection of projects), causing the PMO to assume a different scope in each instance. The plot is a result of the data collected with the surveys at the end of each interview.

The PMO of Case A is mostly not involved in the functions from the groups "Development of Project Management Competencies and Methodologies" and "Strategic Management" because there is a separate entity responsible for the work and quality standards in agile. The primary focus of the PMO is managing the project's information. The responsibility for reporting is decentralized and mainly lies with the individual development teams. The software tools used to track performance automate most of the work of structuring and distributing the documentation. The PMO has two main concerns monitor in aggregate the portfolio's performance and carefully control the high interest and high-risk development initiatives.

Function Group	Functions graded three or more by at least five participants	
Monitoring and Controlling Project	Report project status to upper management*	
Performance	Monitoring and control of project performance*	
	Implement and operate a project information system	
	Develop and maintain a project scoreboard	
Development of Project Management	Develop and implement a standard methodology*	
Competencies and Methodologies	Develop competency of personnel, including training	
	Provide a set of tools without an effort to standardize.	
Multi-Project Management	Coordinate between projects	
	Manage one or more portfolios	
	Manage one or more programs*	
Strategic Management	Provide advice to upper management*	
	Monitor and control the performance of the PMO	
Other	Project administrative support*	
	Portfolio problem solving	
	Cost/benefit analysis of projects	
*Graded four or more by at least five par	ticipants	

Table 2 - List of high grading functions of the PMO in agile environments

The PMO of case B performs most of the functions in the list with a predominant supporting and serving role. All function groups rank high (greater than 3) on average while the functions of the group "Development of Project Management Competencies and Methodologies" rank slightly higher. According to the interviews, the PMO in this firm proactively positioned itself at the center of the training and mentoring of the personnel processes.

The PMO of case C is mainly involved in the financial control of programs (Value Streams and Epics) expressed in the high ranks of the "Monitoring and Controlling Project Performance" group. The PMO performs the functions in this group through a combination of all roles while controlling and coordinating are slightly more expressive. The PMO is also involved in the functions of the remaining groups, where the supporting role is the most expressive one. There is a significant disparity between how the RTE (Release Train Engineer) sees the PMO and how the PMO reports itself. The discrepancy may reflect that the PMOs' functions have context-specific capacities. The interviewed PMO presents their views on their role while the RTE views relate to a broader group of PMOs.

The PMO of case D presents the most variance in the set. Consultant 1 worked as a Scrum Master in the agile period, and as a PMO in the traditional period, Consultant 2, as a PMO in both periods and Consultant 3 joined the firm only in the agile period in the same capacity. The disparities in the group of case D may reflect the specificities of each program under the scope of each PMO. Consultant 1

reported a predominantly supporting role for the PMO in most functions, while consultant 2 reported a balance between the controlling and the serving role, and consultant 3 reported a predominantly coordinating role.

Differences between the PMO before and after agile

The functions of the group "Monitoring and Controlling Project Performance" strongly related to the PMO within the traditional context, and remained so during the agile period. The functions "Develop and implement a standard methodology," Manage one or more programs," Project administrative support," and "Portfolio problem solving" similarly remained strongly related to the PMO after the transition to agile methods (Table 3).

Function Group	Functions graded three or more by at least five participants		
Monitoring and	Report project status to upper management*		
Controlling Project Performance	Monitoring and control of project performance*		
	Implement and operate a project information system*		
	Develop and maintain a project scoreboard*		
Monitoring and	Develop and implement a standard methodology*		
Controlling Project Performance	Promote project management within the organization		
Multi-Project	Manage one or more programs*		
Management	Allocate resources between projects		
Strategic Management	Manage archives of project documentation		
Other	Implement and manage a risk database*		
	Execute Specialized Tasks for Project Managers		
	Project administrative support*		
	Portfolio problem solving		
	Risk management*		
	Project/program delivery management*		
	Managing stakeholders		
*Graded four or more	by at least five participants		
In bold are the function	ns that remained strongly related to the PMO within agile.		

Table 3 - List of high grading functions of the PMO in traditional environments

On the other hand, the respondents report significant differences between the PMOs in each firm before and after the introduction of Agile. The change is also present in the survey results. There seems to be a migration from a predominantly controlling profile to a balance between supporting and controlling with the introduction of agile (Table 4).

Table 4 – Number of times a role was the most attributed to a function in each period

Role	Traditional	Agile
Coordinating	5	8
Controlling	27	13
Supporting	6	18
Serving	2	7



The relevance of function to the PMO in agile as stated by the participant shown with each function's role composition

Monitoring and Controlli.. Development of Project Manag.. Multi-Project Management Strategic Management 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 Case Participant 1 PMO Α Valu Manager Value Consultant в UK Consultant US PMC /alt RTE Valu D Consultant1 🕫 2 Consultant 2 📑 without an effort to standardize. 5 5 new octs and ag.: Coordinate between projects Conduct project audits Manage customer interfaces Proje and manage a database lessons learn equilibri lized Tasks for Pro Mana Recruit, Select, Evaluate, e Salaries for Project Man tize manage efits manage oping the change manage Values ate resources between pr in strategic pl , D management bench Manage one or more po Manage archives o docum Develop competency of pr including Identify, select, and priori ect/program delivery man ate sco project r L g one or more control the perfo a risk Controlling proble NUS ni strati Promote project manager the o Work-family ost-proj Develop and maint implement and ope advice to upper Risk Coordinating Monitoring and cor -B Portfolio p ing for p ide a set of tools velop and impl Serving þ Manage Supporting Diect ž Project r de mer de Ö

Figure 1 - Bar plot of function's marks stated by the participants on the PMO in an agile environment. Data collected in the post-interview survey. The Colors indicate the basic roles the participants associate with a given function. Multiple colors in a bar mean that there was more than one basic role used The relevance of function to the PMO in traditional methods as stated by the participant shown with each function's role composition

Figure 2 - Bar plot of function's marks stated by the participants on the PMO in a traditional environment. Data collected in the post-interview survey. The Colors indicate the basic roles the participants associate with a given function. Multiple colors in a bar mean that there was more than one basic role in use.

In all cases, there was some change in the role the PMO performs or in how related a function was to the PMO's scope. In Case A, over 70% of the function the PMO performs changed. In cases B and c, over 85% and, in Case D, almost all functions saw some change. Participants mentioned that the introduction of agile renders some functions obsolete and decentralizes the responsibilities of other functions to include the teams and other actors, which is one explanation to the changes in roles and relevance of the functions to the PMO. One respondent exemplifies this phenomenon by mentioning that his firm redirected the responsibility for budget planning to the Scrum Masters:

"[On] Budgetary control, [the PMO] had taken a very strong ownership of it before I was there. But, increasingly, they [the firm] were looking to move some of those responsibilities onto the scrum master's shoulders [...]. So budgetary commitments were something that was distributed out to scrum masters [from the scope of the PMO]." (Case B – Consultant UK 00:09:25)

Contrasting Figure 2 and Figure 1, there is a significant reduction of the scope of the PMO in Case A. As a result of the agile transition, the firm created an independent structure to curate the agile standards. Therefore, the group "2: Development of project management competences and methodologies" grade much lower in agile than it did in the traditional environment for Case A's PMO. In cases B and C, on the other hand, the PMO incorporates scope in both group 2 and group "4: Strategic Management", which could be a result of the reduction of more administrative work in their scope.

There is a shallow resemblance between the accounts of the participants of case D. There seems to be a core attribution of the PMO within the functions of the group "Monitoring and Controlling Project Performance" while the remaining groups appear to behave on an ad-hoc basis.

Patterns observed

The previous section described how the roles of the PMO are different from traditional methods to agile methods; most of the cases had significant differences between the two periods. This section's goal is to identify possible patterns in these cases.

Rise of supporting and serving roles

The first pattern is the tendency to reduce the controlling participation in the role mix, favoring the increase of supporting and serving roles. Figure 3 illustrates this shift. There, the share of functions classified as controlling reduces, and the share classified as supporting and serving increases in every case. The pattern is not apparent in Case A due to the descoping of the PMO described in Chapter 3. One participant clearly states this in the passage:

"I see retrospectively the journey that this particular client took was to try to move away from the PMO as a control organization and more into the other three types [**Coordinating, supporting and serving**] [...]I mean a lot of these [**functions**] started [**in the period before the transition**] as a control mechanism and then [**with agile ways of working**] pivoting into those others." (Case B – Consultant 2 00:43:18) Number of functions within a role grouped by case and period; labels indicate the number of functions reported by the respondent



Figure 3 – Number of functions classified in each role according to the participants' reports grouped by case, period, and role. The labels illustrate the total number of functions the participant associated with the PMO. CR stands for the coordinating role, CT for the controlling, SP for the supporting, and SV for the serving.

Software tools enabled the distribution of tasks

The reports of the participants from cases B and C indicated that a new generation of project management software tools associated with the agile process designs enabled the teams to take the responsibility of tasks usually related to the PMO. What was once a very specialized skill could be done with relative ease with the use of tools such as JIRA and Confluence. It is was not possible to isolate the findings in this research from the implementation of automated processes. The tools allow repetitive work to be automated, reducing knowledge barriers to their execution. This way, most of everyday reporting and risk management became part of the development team's scope and reduced the time the PMO spent with administrative tasks. The following quote illustrates how a participant from case C perceived the phenomenon.

"[With JIRA], there is no manual effort required to check what is my delivery output for a certain sprint or cadence. Even for a release, [a full release requires a collection of sprints]. So I think a lot of this stuff, which probably earlier was done manually [...] comes out of the tool just on the click of a button. And that[...] has given some ease there. [...]I would say processes have been optimized and [...] reduced to the minimum required." (Case C - RTE 00:18:29)

Emergence of structure

In all cases explored in this research, the autonomy of development teams goes as far as choosing their ways of working independently. That means that the operational level of development is not standardized in the cases discussed. As a result, different teams use different indicators to track their progress. The participants report that this practice harms inter-team comparability and communication, which limits the integration of the output of different teams.

There are two complications derived from the inter-team dissonance. First, decision-makers in the firm have a tougher time making sense of the different streams of data and are more prone to error.

Second, the teams caught up in the continuous delivery loop get alienated from the firm's long-term mission, goals, and strategies.

These issues are not new to the firm, and enterprises have devised means to coordinate work in several complex scenarios. A participant exemplifies how the need for structure manifests itself, and traditional methodologies can be incorporated into the agile environment to solve this coordination issue.

"Well, it goes with the agile transition that people start getting a bit at allergic to any kind of standardization. So, then you usually go through a cycle that first people say: 'well, we had the old way of working and now we have got agile. So, we forget everything [we did before]. We will just find it out [, **the best way of working, independently by**] ourselves.' And [...] now they are gradually going back **[on this decision**]. Because, well, you do have to meet some standards. At least the external standards that are set by the regulators. And then it helps if you have a quality system if you have things **[tools and processes**] available. That you do not have to reinvent the wheel every time." (Case A - PMO Manager 01:03:56)

The PMO is continuously changing

The interviews closed with an open question for the participant to share insights on what they felt was relevant to understand the PMO in their organization further. Most of the responses hinted to an unsettlement of the PMO. The PMO and possibly other actors in the firm are not yet accommodated, in the sense that they are always incorporating extra functions, participating in new networks, and tweaking the way they do their jobs. One participant brings a personal anecdote to illustrate that agile will not be the end of the changes because there will always be a new thing.

"There is always [**a new philosophy**], I have seen that a number of times in this company, but also elsewhere. That there is always this balance [**of**] going this way and that way. [**As an example**,] everybody goes into PRINCE2. And then the theory of constraints. We have had them all." (Case A - PMO Manager 01:06:45)

5 Conclusions

The main objective of this thesis was to explore the impact on the roles of the PMO of the introduction of agile in several teams. The idea is that by exploring the theme, the study would be able to formulate a hypothesis that future studies could test on how the roles of the PMO change and help businesses to better prepare for an extensive transition to agile. The motivation for this study is the lack of consensus in the roles of the PMO across project management methodologies, but especially in agile methods. As a result, firms create a PMO without a clear view of how to design the PMO to achieve the expected goals. PMOs are an ambiguous entity that is associated with better project performance while surviving an average of two years before dissolution.

This study proposed the research question "How do the roles of Project/Program/Portfolio Management Offices change with the introduction of Agile methodologies to a large number of teams?" to address the knowledge gap on the changing roles of PMOs with agile.

Chapter 2 pursued the answer to the first two questions through a systematic literature study covering publications in traditional and agile methods, and a review of the principal available standards. This study observed that the PMOs' roles vary; they are path-dependent and in constant change. As a result,

there is no unified terminology to describe the PMO, which makes this task challenging. Different authors use similar terms with different meanings, and analysis often relies on abstract and subjective perceptions. The specific literature on the PMO in an Agile context does not build much further than the pre-existing general research on the PMO.

To overcome the description problem, this thesis proposed a taxonomy framework to objectively describe the PMO and analyze the changes of roles due to agile. The framework, available in Figure 1, uses a combination of thirty-six functions and four basic roles to explain the mandate of the PMO. This study applied this framework in four cases. The data collection in the case studies was conducted through semi-structured interviews and surveys with nine respondents, two per case, and three in one case. The survey was the source of the quantitative data used in the analysis, and the interviews' transcripts, the qualitative data.

The application of the framework captured detailed insights n the case and possibilities the mapping of the PMO roles before and after the introduction of agile. The main results of this study are the following: 1 - There seem to be significant differences between PMOs from different companies; 2 - The data analyzed from the cases in this thesis seem to indicate that the changes in roles of the PMO between the traditional period and the agile periods are related to the introduction of agile, although this study did not establish a causation relationship.; 3-There are indications that PMO remains a crucial piece in the functions listed in the groups "Monitoring and Controlling Project Performance" and "Development of Project Management Competencies and Methodologies."; 4-The change in the roles of the PMO is a reduction of the overall scope of the PMO and a shift from a predominant controlling role to a supporting and serving role.

This study confirmed the observations of previous research on the diversity of PMO designs; it observed that the PMOs change as a result of the introduction of agile and that the governance and control are essential attributions of the PMO. The PMO's descriptions given by participants vary considerably from case to case and within cases. However, there are some similarities in the different reports.

The agile scope of the PMOs this study observed concentrates on the functions of the groups "Monitoring and Controlling Project Performance" and "Development of Project Management Competencies and Methodologies. "The PMO performs these functions in all four basic roles of the model. The PMO is strongly related to reporting, governance, and risk management functions, It shares this responsibility with development teams and business units.

The difference between the PMO in traditional and agile environments lies in the PMO's reduction of scope due to the autonomy development teams gain, and the simplification of management processes. The PMOs shift from a predominantly controlling profile to a supporting and serving profile. The PMO remains a crucial piece in "Monitoring and Controlling Project Performance" and "Development of Project Management Competencies and Methodologies. "but the standards are flexible, and there is less emphasis on enforcing them.

The acquired freedom teams have on the ways they organize their work and how they track their performance causes friction when the interdependency between different team grows. The complexity of coordinating the delivery of a large number of development groups leads to the emergence of a need for an orchestration structure. As most agile standards do not include this structure, the PMO incorporates functions that help to steer the teams and conciliate interdependencies.

The modernization of software tools that make knowledge sharing more accessible and automate control intensive and administrative tasks seems to enable the distribution of responsibilities from the PMO to the teams. Although this factor is not directly related to agile methodologies, it was not possible to separate it from the overall phenomenon. The different agile standards propose their set of artifacts and rituals related to knowledge management and communication. It seems that software developers have caught up with the trend to adopt agile and provide firms with the products that fit these artifacts' purposes in such a way that the use of non-digital alternatives is seldom.

Contributions

The contribution to science of this study is twofold. First, it contributes to the description of the PMO, enriching the field towards a unified theory of project management. Second, it provides empirical evidence for the changes in roles of the PMO with the introduction of agile.

Implications to the industry

The direct implication of this study is the recommendation for further investigation. The approach taken in this study did not attempt to test the underlying perception of the value a PMO adds to a firm but to explore its configurations and effects of agile. In this sense, the study has not found specific patterns that lead to immediate courses of action. Instead, it confirms claims of previous research on the specificity of the PMO's design to the context surrounding it. Despite the clarifications brought by the findings of this study, the effects of agile in the role of the PMO remain nebulous and unclear in the sense that there is still no theoretical explanation.

It seems that the trend to the PMO is to concentrate on supporting and serving roles, standardizing processes without enforcing their mandatory adoption. This approach gives the development teams enough freedom to be innovative and flexible as agile proposes while preventing wasteful expense in "reinventing the wheel" each time some routine needs standardization. The findings of this study seem to indicate that the firms with a large number of teams working in agile will have a greater need for a coordination structure.

Limitations

The work presented here has some limitations to validity and generalization. First, the study was not able to fully separate the effects of the agile transition from other organizational changes. Second, the study relies on the memory of participants to collect data. This study attempted to mitigate this risk by interviewing multiple participants in each case and using a survey to guide participants on the process. For privacy concerns, the study had no access to any documentation that could help further substantiate the findings in this research. Third, the sample is too small to establish the statistical significance of the observed conclusions. The studies that attempted to do so resorted to massive scale surveys. Forth, it is in people's nature to improve their environments and quality of life. Regardless of project management standard or management philosophy, people will always strive to improve, and the change is constant. And, finally, this study investigated firms which have kept the PMO after introducing agile, overlooking the companies which didn't.

Future work

All topics addressed or touched upon in this research are vast. At several points on the design and development of the study, different ideas and directions crept the scope at hand. Although it was not

possible to address all fronts, the author offers this section to recommend future work following the efforts presented in this document.

This work is strictly exploratory and gives insights on what are the changes to the role of the PMO. There are two natural extensions to this effort; the first one is to explore the impacts of agile in other positions of the organization associated with traditional project management. The findings in this research indicate that not only the PMO responds to the changing environment in the firm, but other actors in the network would react to it as well. This branches to further questions such as: How do the socio-political structure of the firm shapes organizational change?

Second, while other studies have investigated the patterns in which the PMOs change (not restricted to agile), this study attempted to identify patterns that emerge specifically when the PMO changes due to the introduction of agile. The fact that the PMO remains in this hybrid construct of agile and traditional methods can't be said to be good or bad. Although the testimony of most participants advocated for the improvement the new format represents, the research conducted here did not assess it. Therefore, there remains the question: to what ends do the choices made during the transition to agile serve?

This study investigated the changing roles of PMOs in companies that have maintained a PMO after the introduction of agile. Future work should also contemplate the firms that have disbanded their PMO structures.

6 Declaration of interest

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Appendix 1 - Functions of the PMO

Group	Id	Function	Source
Monitoring and Controlling Project	1	Report project status to upper management	(<u>Hobbs & Aubry, 2007</u>)
Performance	2	Monitoring and control of project performance	(Bredillet et al., 2018a, 2018b; Hobbs & Aubry, 2007; Pellegrinelli & Garagna, 2009; Salameh, 2014; Thiry & Deguire, 2007)
	3	Implement and operate a project information system	(<u>Bredillet et al., 2018a;</u> <u>Hobbs & Aubry,</u> 2007; Kerzner, 2003)
	4	Develop and maintain a project scoreboard.	(<u>Hobbs & Aubry, 2007</u>)
Development of Project Management Competencies and Methodologies	5	Develop and implement a standard methodology	(Andersen et al., 2007; Bredillet et al., 2018a, 2018b; Dai & Wells, 2004; Hobbs & Aubry, 2007; Kerzner, 2003; Pellegrinelli & Garagna, 2009; Salameh, 2014; Thiry & Deguire, 2007)
	6	Promote project management within the organization	(Bredillet et al., 2018a, 2018b; Hobbs & Aubry, 2007; Power, 2011)
	7	Develop competency of personnel, including training	(Andersen et al., 2007; Dai & Wells, 2004; Hobbs & Aubry, 2007; Kerzner, 2003)
	8	Provide mentoring for project managers	(Dai & Wells, 2004; Hobbs & Aubry, 2007; Kerzner, 2003; Pellegrinelli & Garagna, 2009)
	9	Provide a set of tools without an effort to standardize.	(<u>Hobbs & Aubry, 2007; Pellegrinelli &</u> Garagna, 2009)
Multi-Project	10	Coordinate between projects	(Hobbs & Aubry, 2007)
Management	11	Identify, select, and prioritize new projects	(Hobbs & Aubry, 2007; Pellegrinelli & Garagna, 2009)
	12	Manage one or more portfolios	(Hobbs & Aubry, 2007; Salameh, 2014)

Table 5 - PMO functions (adapted from <u>Hobbs and Aubry (2007, p. 82)</u>)

Group	Id	Function	Source
	13	Manage one or more programs	(Hobbs & Aubry, 2007)
	14	Allocate resources between projects.	(Bredillet et al., 2018b; Dai & Wells, 2004;
			Hobbs & Aubry, 2007; Kerzner, 2003;
			Pellegrinelli & Garagna, 2009; Salameh,
			2014; Thiry & Deguire, 2007)
Strategic Management	15	Provide advice to upper management	(<u>Andersen et al., 2007; Hobbs & Aubry,</u> 2007)
	16	Participate in strategic planning	(Hobbs & Aubry, 2007; Salameh, 2014)
	17	Benefits management	(Hobbs & Aubry, 2007)
	18	Network and provide environmental scanning.	(<u>Hobbs & Aubry, 2007</u>)
	19	Monitor and control the performance of the PMO	(Artto et al., 2011; Hobbs & Aubry, 2007)
	20	Manage archives of project	(Bredillet et al., 2018a, 2018b; Dai & Wells,
		documentation	2004; Hobbs & Aubry, 2007; Kerzner, 2003)
	21	Conduct post-project reviews	(Hobbs & Aubry, 2007)
	22	Conduct project audits	(Hobbs & Aubry, 2007)
	23	Implement and manage a database of lessons learned	(<u>Hobbs & Aubry, 2007</u>)
Other	24	Implement and manage a risk database.	(Hobbs & Aubry, 2007)
	25	Execute Specialized Tasks for Project	(Andersen et al., 2007; Hobbs & Aubry,
		Managers	2007)
	26	Manage customer interfaces	(<u>Hobbs & Aubry, 2007</u>)
	27	Recruit, Select, Evaluate, and	(<u>Hobbs & Aubry, 2007</u>)
		Determine Salaries for Project	
		Managers	
Not Listed in <u>Hobbs</u>	28	Project administrative support	(Andersen et al., 2007; Artto et al., 2011; Dai
<u>and Aubry (2007)</u>			& Wells, 2004; Pellegrinelli & Garagna,
			2009; Salameh, 2014)
	29	Work-family equilibrium	(<u>Aubry, Hobbs, et al., 2010</u>)
	30	Developing the change management database	(Bredillet et al., 2018b; Salameh, 2014)
	31	Portfolio problem solving	(Bredillet et al., 2018b)
	32	Cost/benefit analysis of projects	(Kerzner, 2003; Pellegrinelli & Garagna, 2009)
	33	Risk management	(Artto et al., 2011; Pellegrinelli & Garagna, 2009)
	34	Project/program delivery management	(Desouza & Evaristo, 2006; Salameh, 2014)
	35	Project management benchmarking	(Kerzner, 2003)
	36	Managing stakeholders	(<u>Kerzner, 2003</u>)

Appendix BLiterature Review Research QueriesB.1Academic literature review query

TITLE-ABS-KEY (pmo OR "Project Management Office" OR "Program Management Office" OR "Portfolio Management Office") AND (LIMIT-TO (SUBJAREA, "ENGI") OR LIMIT-TO (SUBJAREA, "BUSI") OR LIMIT-TO (SUBJAREA, "COMP") OR LIMIT-TO (SUBJAREA, "MULT") OR LIMIT-TO (SUBJAREA, "DECI") OR LIMIT-TO (SUBJAREA, "ECON") OR EXCLUDE (SUBJAREA, "MATE") OR EXCLUDE (SUBJAREA, "PHYS") OR EXCLUDE (SUBJAREA, "CHEM") OR EXCLUDE (SUBJAREA, "CENG") OR EXCLUDE (SUBJAREA, "AGRI") OR EXCLUDE (SUBJAREA, "AGRI") OR EXCLUDE (SUBJAREA, "AGRI") OR EXCLUDE (SUBJAREA, "BIOC") OR EXCLUDE (SUBJAREA, "MULT"))

B.2 Academic literature review query including agile

TITLE-ABS-KEY ((pmo OR "Project Management Office" OR "Program Management Office" OR "Portfolio Management Office") AND "agile") AND (LIMIT-TO (SUBJAREA, "ENGI") OR LIMIT-TO (SUBJAREA, "BUSI") OR LIMIT-TO (SUBJAREA, "COMP") OR LIMIT-TO (SUBJAREA, "MULT") OR LIMIT-TO (SUBJAREA, "DECI") OR LIMIT-TO (SUBJAREA, "ECON") OR EXCLUDE (SUBJAREA, "MATE") OR EXCLUDE (SUBJAREA, "PHYS") OR EXCLUDE (SUBJAREA, "CENG") OR EXCLUDE (SUBJAREA, "CHEM") OR EXCLUDE (SUBJAREA, "CENG") OR EXCLUDE (SUBJAREA, "AGRI") OR EXCLUDE (SUBJAREA, "BIOC") OR EXCLUDE (SUBJAREA, "MULT") OR EXCLUDE (SUBJAREA, "BIOC") OR EXCLUDE (SUBJAREA, "MULT"))

B.3 Trade publications query including agile

(pmo OR "Project Management Office" OR "Program Management Office" OR "Portfolio Management Office") AND ("agile" OR "scrum" OR "Kanban")

Appendix C Interview Protocol C.1 Setup C.1.1. In-person

- Android recording app;
- Windows recording app and microphone;
- Several sheets of paper to help organizing thoughts.

C.1.2. Remote

• Skype broadcast set up by Accenture colleague with skype recording permission.

C.2 Topics and Questions C.2.1. To Respondents

Introduction

Please make sure to present the following to the participant, before you start the interview:

- Thank the participant for his/her voluntary participation in this research.
- The participant may stop at any given moment, without a given reason.
- The interview is part of my master thesis research project that investigates how the roles of the PMO change with the introduction of agile methodologies on large scale.
- The goal of the interview is to find out your view on this change according to your experience.
- The interview data will be stored securely at the TU Delft Datacenters.
- Check if the participant has any questions.
- Double-check if the participant is ok with recording the interview.
- (NOTE: if yes, make sure you also record this consent on the recording itself)

Demographic questions (can include follow up questions)

- 1. How many employees the company has
- 2. How many teams work with agile?
- 3. What is the average size of these teams?
- 4. What is your role in the company?

Case Questions

- 1. Can you describe, to the best detail you can remember, the tasks and processes the PMO performs?
- 2. What, in your view, are the responsibilities of the PMO? Do you see that the tasks are aligned to these responsibilities?
- 3. Which of these activities, tasks, processes and responsibilities are a result of the Agile transformation?
- 4. Can you recall any aspects of the PMO's scope that were left behind in the transition?
- 5. Has any share of that scope been picked up by other roles post-transition? Which and by whom?
- 6. Is there anything that was done before and wasn't picked up by any role that you miss? What?
- 7. Which parts of the present scope would you describe as a "pain"?
- 8. Consider the following descriptions of the PMO, which would you say describe best the PMO you had before and the PMO you have now?

A list of definitions based on the literature study will be presented the assessment is made through a Likert Scale (Levels 1 till 5 of relevance)

9. Which other institutional changes were in place along with the Agile transition? Which would you say influenced the shaping of the present PMO?
10. What would you like to further comment on the PMO that is fundamental to understand the PMO's role in your organization?

C.2.2. To Consultants

Introduction

Please make sure to present the following to the participant, before you start the interview:

- Thank the participant for his/her voluntary participation in this research.
- The participant may stop at any given moment, without a given reason.
- The interview is part of my master thesis research project that investigates how the roles of the PMO change with the introduction of agile methodologies on large scale.
- The goal of the interview is to find out your view on this change according to your experience.
- The interview data will be stored securely at the TU Delft Datacenters.
- Check if the participant has any questions.
- Double-check if the participant is ok with recording the interview.
- (NOTE: if yes, make sure you also record this consent on the recording itself)

Demographic questions (can include follow up questions)

- 1. How many employees the company has
- 2. How many teams work with agile?
- 3. What is the average size of these teams?
- 4. What is your role in the company?

Case Questions

- 1. Can you describe, to the best detail you can remember, the tasks and processes the PMO performed by the end of your time at the project?
- 2. What, in your view, were the responsibilities of the PMO? Do you see that those tasks were aligned to these responsibilities?
- 3. Which of these activities, tasks, processes and responsibilities were a result of the Agile transformation?
- 4. Can you recall any aspects of the PMO's scope that were left behind in the transition?
- 5. Has any share of that scope been picked up by other roles post-transition? Which and by whom?
- 6. Is there anything that was done before and wasn't picked up by any role that you miss? What?
- 7. Which parts of the most recent scope you've been exposed to would you describe as a "pain"?
- Consider the following descriptions of the PMO, which would you say describe best the PMO the client had before the transition and the PMO they had by the end of your participation?
 A list of definitions based on the literature study will be presented the assessment is made through a Likert Scale (Levels 1 till 5 of relevance)
- 9. Which other institutional changes were in place along with the Agile transition? Which would you say influenced the shaping of the present PMO?
- 10. What would you like to further comment on the PMO that is fundamental to understand the PMO's role in this organization?

	Case ID		Date	
#	Function	Scale	Role	Comments
1	Report project status to upper management	Before: NAO 10000 5	Before CROCTOSIOSV	
		After: NAO 10000 5	After CR CT SI SV	
2	Monitoring and control of project performance	Before: NAO 10000 5	Before CROCTOSIOSV	
		After: NAOCCO 5	After CR CT SI SV	
3	Implement and operate a project information system	Before: NAO 1000 5	BeforeOCIOCIOSIOSV	
		After: NAOCOCO 5	After CR CT SI SV	
4	Develop and maintain a project scoreboard.	Before: NAO 10000 5	Before CROCTOSIOSV	
		After: NAOCCO 5	After CROCTOSIOSV	
5	Develop and implement a standard methodology	Before: NAO 1000 5	BeforeOCIOSIOSV	
		After: NAOCCO 5	After CROCTOSIOSV	
6	Promote project management within the organization	Before: NAO 10000 5	BeforeOCIOCIOSIOSV	
		After: NAOCCO 5	After CROCTOSIOSV	
7	Develop competency of personnel, including training	Before: NACTION 5	BeforeOCIOCIOSIOSV	
		After: NAO 10000 5	After CROCTOSPOSV	
8	Provide mentoring for project managers	Before: NAO 10000 5	BeforeOCIOCIOSIOSV	
		After: NAOCCO 5	After CROCTOSIOSV	
9	Provide a set of tools without an effort to standardize.	Before: NACTOR 5	BeforeOCIOCIOSIOSV	
		After: NAOCCO 5	After CROCTOSIOSV	
10	Coordinate between projects	Before: NAO 1000 5	BeforeOCIOSIOSV	
		After: NAO OOOO 5	After CROCTOSIOSV	

	Case ID		Date	
#	Function	Scale	Role	Comments
11	Identify, select, and prioritize new projects	Before: NAO 10000 5	Before CIOCIOSIOSV	
		After: NAO 0000 5	After CROCTOSIOSV	
12	Manage one or more portfolios	Before: NAO 10000 5	Before CROCTOSIOSV	
		After: NAO 10000 5	After CR CT SI SV	
13	Manage one or more programs	Before: NAO (COCC) 5	BeforeOCIOCIOSIOSV	
		After: NAOCCO 5	After CROCTOSIOSV	
14	Allocate resources between projects.	Before: NAO (COCCO 5	BeforeOCIOSIOSV	
		After: NAO COCO 5	After CROCTOSIOSV	
15	Provide advice to upper management	Before: NAO 1000 5	BeforeOCROCTOSIOSV	
		After: NAO COTO 5	After CROCTOSIOSV	
16	Participate in strategic planning	Before: NAO 1000 5	BeforeOCROCTOSPOSV	
		After: NAO 10000 5	After CR CT SI SV	
17	Benefits management	Before: NAO 1000 5	BeforeOCROCTOSIOSV	
		After: NAOCCO 5	After CROCTOSIOSV	
18	Network and provide environmental scanning.	Before: NAO 1000 5	BeforeOCROCTOSPOSV	
		After: NAO 10000 5	After CROCTOSIOSV	
19	Monitor and control the performance of the PMO	Before: NAO 1000 5	BeforeOCROCTOSIOSV	
		After: NAO 10000 5	After CROCTOSIOSV	
20	Manage archives of project documentation	Before: NAO (QQQO 5	BeforeOCROCTOSIOSV	
		After: NAO COMO 5	After CROCTOSIOSV	

	Case ID		Date	
#	Function	Scale	Role	Comments
21	Conduct post-project reviews	Before: NAO 1000 5 After: NAO 10000 5	Before CR CT SI SV	
22	Conduct project audits	Before: NACTION 5	Before CR CT SI SV	
		After: NAOCCO 5	After CROCT SIOSV	
23	Implement and manage a database of lessons learned	Before: NA 1000 5	BeforeOCIOCIOSIOSV	
		After: NAOCO 5	After CROCTOSIOSV	
24	Implement and manage a risk database.	Before: NACTION 5	Before CROCTOSIOSV	
		After: NAOCOCO 5	After CROCTOSIOSV	
25	Execute Specialized Tasks for Project Managers	Before: NACION 5	BeforeOCIOCIOSIOSV	
		After: NAOCO 5	After CROCTOSIOSV	
26	Manage customer interfaces	Before: NACTION 5	BeforeOCIOCIOSIOSV	
		After: NAO 10000 5	After CROCT SIOSV	
27	Recruit, Select, Evaluate, and Determine Salaries for Project	Before: NACTION 5	Before CROCTOSIOSV	
	Managers	After: NAO 10000 5	After CROCT SIOSV	
28	Project administrative support	Before: NACTION 5	Before CROCTOSIOSV	
		After: NAOCO 5	After CROCTOSIOSV	
29	Work-family equilibrium	Before: NACTION 5	Before CROCTOSIOSV	
		After: NAO COMO 5	After CROCT SIOSV	
30	Developing the change management database	Before: NACION 5	BeforeOCIOCIOSIOSV	
		After: NAOCCO 5	After CROCT SIOSV	

	Case ID		Date	
#	Function	Scale	Role	Comments
31	Portfolio problem solving	Before: NAO (COCC) 5	Before CROCTOSIOSV	
		After: NAO 100000 5	After CR CT SI SV	
32	Cost/benefit analysis of projects	Before: NAO 10000 5	Before CROCTOSIOSV	
		After: NAO OOOO 5	After CR CT SI SV	
33	Risk management	Before: NAO 10000 5	Before CR CT SI SV	
		After: NAO COOD 5	AfterOCIOSIOSV	
34	Project/program delivery management	Before: NAO 10000 5	Before CROCTOSIOSV	
		After: NAO COOD 5	After CR CT SR SV	
35	Project management benchmarking	Before: NACION 5	BeforeOCROCTOSIOSV	
		After: NAO COOD 5	After CR CT SI SV	
36	Managing stakeholders	Before: NAO 10000 5	BeforeOCIOSIOSV	
		After: NAO COMO 5	AfterOCIOCIOSIOSV	

THE BASIC ROLES

The **coordinating role** is more likely to be present in PMOs that manage multiple projects, a or some programs and portfolio (<u>Too & Weaver, 2014</u>). It is the role assumed by the PMO when conducting resource management functions and mediating stakeholders (<u>Unger et al., 2012</u>). Associated with this role are functions like resource allocation and mediating conflict.

The **controlling role** is associated with the traditional command and control style of management (<u>Nerur</u> et al., 2005). PMOs assume this role when enforcing project management standards, guaranteeing projects compliance with internal and external regulations and evaluating project performance. In this role, the PMO contributes to increasing transparency and stabilizing an information system (<u>Müller et al., 2013</u>; <u>Unger et al., 2012</u>).

The **supporting role** is the role the PMO takes when it facilitates knowledge transferring between projects and teams and develops and maintains project management standards, for instance (<u>Unger et al., 2012</u>).

The **serving role** is the role the PMO takes when it provides services to other units. Be it by conducting training, consulting and administrative functions or specialized tasks. (<u>Müller et al., 2013</u>)

Functions in an Aggregated level

- 1. **Monitoring and Controlling project performance** this group involves reporting to upper management, defining performance criteria, monitoring and controlling performance and managing the project's information system.
- 2. Development of Project Management Competencies and Methodologies this groups relates to training, mentoring and coaching of project management professionals, defining project standards and spreading the firms' project management culture.
- 3. **Multi-Project Management** this group relates to the management of the firm's portfolio, and it includes the allocation of resources among projects prioritizing the business strategic goals and orchestrating interdependencies between projects and programs.
- 4. **Strategic Management** this group includes advising upper management, participating in strategic planning and stakeholder management.
- 5. **Organizational Learning** this group deals with performance monitoring and control, project documentation, assessment, audition and cataloging.

Appendix D SAFe

SAFe is modularly designed to embrace from very small companies to organizations with thousands of employees. Its flexibility is built on optional layers that are recommended for larger corporations. Figure 17 presents the full version of the framework. Its documentation is detailed specifying several patterns of the method. This makes the transitioning to it a more predictable process. (Kalenda et al., 2018; Uludağ, Kleehaus, Xu, & Matthes, 2017)

The team level is the base of the framework. It adds little to the standard Agile practices. The main increment is that all teams are part of the agile release train (ART). The ART is the program level structure that coordinates all teams for synchronizing and aligning their activities with other teams. The ART assures continuous and harmonic releases of the teams. Apart from it, the team organizes its work in sprints and is completely independent are accountable for its stories from definition to testing. The program level behaves similarly to the team routine. The ART lasts for 5 sprints and ends on a reflection period for recursive improvement. (Kalenda et al., 2018; Stojanov, Turetken, & Trienekens, 2015)

The portfolio level guides the enterprise's mission. It translates long term strategies into the funding of projects while avoiding compromising near-term opportunities. In the framework's terms, it governs a set of development value streams. Particularly, this level incorporates some of the more traditional project management techniques such as business cases, budgeting and enterprise architecture. SAFe, in this layer, recognizes the need of at least some prior structure to agile projects. The roles it incorporates are Lean Portfolio Management, Epic Owners and Enterprise Architect. (Kalenda et al., 2018; Scaled Agile Inc, 2018d; Stojanov et al., 2015)

The final layer, the large solution level, is designed to manage complex projects encompassing more than 10 teams. It is a step in between the program level and the portfolio level. The document "Solution Intent" is organized in a similar fashion to a traditional requirements breakdown structure (RBS) backed up with A few aspects of requirements engineering are incorporated in this level. Better refined budget control and decision model is described as the "economic framework". It keeps several ART's in sync by controlling the Solution Train (ST) and it's the closest layer to the consumer. (Kalenda et al., 2018; Scaled Agile Inc, 2018b; Stojanov et al., 2015)



Figure 17 - SAFe Framework for Lean Enterprises - extracted from (Scaled Agile Framework, n.d.)

Appendix E Results from literature research on Scaled Agile

The summary of the literature research on Scaled Agile Methodologies is summarized in Table 16, bellow.

Table 1	16 -	Literature	research	summary
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Main contribution to this study	Sources
Agile practices	Abrahamsson et al. (2003); Conforto et al.
	(2014); Drury, Conboy, and Power (2012); Lee
	and Xia (2010); Meyer (2014); Serrador and
	<u>Pinto (2015)</u>
Challenges and Success Factors on Agile	<u>Chow and Cao (2008);</u> <u>Nerur et al. (2005);</u>
	Serrador and Pinto (2015)
Scaled Agile Models	Kettunen and Laanti (2017); Paasivaara (2017)
	Kalenda et al. (2018); Uludağ et al. (2017)
	Razzak, Noll, Richardson, Canna, and Beecham
	(2017); Stojanov et al. (2015)
Scaled Agile Maturity Models	Stojanov et al. (2015)
Challenges and Success Factors on Scaled Agile	Kalenda et al. (2018); Razzak et al. (2017)
	Paasivaara (2017)

E.1 The transition to large scale agile implementations

Expanding Agile methods from the team level to organization-wide reach is not trivial. An organization has more complex internal and external structures. As a result, the (perhaps excessive) flexibility of team-level agile can't properly accommodate the coordination needs of large and complex firms.

There are a series of frameworks that attempt to scale agile to large projects or enterprises (e.g.; SoS, LeSS, Nexus, Spotify). Among them, <u>Uludağ et al. (2017)</u> Highlights Scaled Agile Framework (SAFe), Large Scale Scrum (LeSS) and Disciplined Agile Delivery (DA 2.0 or DAD) as the most mature methods in the field. <u>Razzak et al. (2017)</u> argues for SAFe's relevance, as does the methods website, saying it is the most adopted scaling method. The Version One 2018 (<u>VersionOne, 2018</u>) reports SAFe being adopted by 29% of respondents followed by Scrum of Scrums (SoS) with 19%. Both LESS and DA report 5% adoption. Furthermore, the author proclaims that the other frameworks build little further than the regular Scrum.

Having said that, apart from LESS (Huge) none of these methods addresses more than 10 teams in an organization (Kalenda et al., 2018). Quite arbitrarily, <u>Dingsøyr et al. (2014)</u> proposes that large-scale deployments of Agile deal with 2 to 9 teams, whilst very large-scale address over 10 teams. Following the authors' taxonomy, the discussion of this research proposal figures within the very large-scale frame.

When investigating agile and scaled agile implementations one of the most popular methods is to conduct case studies. Most publications found by this literature research, even when covering multiple cases, are restricted to a single company environment. It can be observed that each individual company implements the framework in its own way. Each organization also chooses which aspects of the framework suits their needs better. Although there is much effort on SAFe to design a solution that fits all purposes with a clear roadmap for implementation, actors seem to prefer their own ways.

Kalenda et al. (2018); Razzak et al. (2017) Paasivaara (2017) discuss the success factors that influence the scaling up of agile methods throughout the organization. VersionOne (2018) also presents the most

common reasons that motivate companies to adopt large scale agile. It is very hard to identify how do these success factors impact the implementation of any chosen methodology. This is due to the multiplicity of frameworks different companies choose to implement and the different perspective with which each industry perceives success on the implementation.

Through an extensive literature research <u>Kalenda et al. (2018)</u> appoints as main challenges to the implementation: resistance to change, challenges resulting from distributed location of teams, quality assurance, integration with non-agile parts of the firm, lack of commitment and teamwork, excessive pressure and workload, lack of knowledge in the methodology, requirement management hierarchy, measuring progress. Their survey finds some support on the work of <u>Paasivaara (2017)</u> comparing two cases in the same company, were the impact of previous training and resistance to change were identified as challenges. <u>Stettina and Hörz (2015)</u> identify out of semi-structured interviews requirement management hierarchy and integration with non-agile parts of the firm as challenges. Other technical issues seem to be common, however, the terminology used across studies varies significantly. So much so that comparison becomes a guessing game.

Scientific production on large scale implementations mostly cover single case. Although the framework proposes a roadmap (<u>Scaled Agile Inc, 2018a</u>), there are several complications that are not covered.

Appendix F The functions of the PMO according to the standards

Table 17 - The functions of the PMO according to standards

Group	Id	Function	Source	PMI (<u>Project</u> <u>Management</u> <u>Institute, 2017</u>)	PRINCE2 (<u>Alexos,</u> <u>2017</u>)	SAFe (<u>Scaled</u> <u>Agile</u> <u>Inc.</u> 2018c)
	1	Report project status to upper management	(<u>Hobbs & Aubry,</u> <u>2007</u>)	Х		Х
Monitoring and Controlling Project	2	Monitoring and control of project performance	(Bredillet et al., 2018a, 2018b; Hobbs & Aubry, 2007; Pellegrinelli & Garagna, 2009; Salameh, 2014; Thiry & Deguire, 2007)	Х	Х	х
Performance	3	Implement and operate a project information system	(<u>Bredillet et al.,</u> <u>2018a; Hobbs &</u> <u>Aubry, 2007;</u> <u>Kerzner, 2003</u>)	X	Х	Х
	4	Develop and maintain a project scoreboard.	(<u>Hobbs & Aubry,</u> <u>2007</u>)	Х	Х	Х
	5	Develop and implement a standard methodology	(Andersen et al., 2007; Bredillet et al., 2018a, 2018b; Dai & Wells, 2004; Hobbs & Aubry, 2007; Kerzner, 2003; Pellegrinelli & Garagna, 2009; Salameh, 2014; Thiry & Deguire, 2007)	Х		х
Development of Project Management	6	Promote project management within the organization	(Bredillet et al., 2018a, 2018b; Hobbs & Aubry, 2007; Power, 2011)	Х		
Competencies and Methodologies	7	Develop competency of personnel, including training	(Andersen et al., <u>2007; Dai & Wells,</u> <u>2004; Hobbs &</u> <u>Aubry, 2007;</u> <u>Kerzner, 2003</u>)	Х		
	8	Provide mentoring for project managers	(<u>Dai & Wells, 2004;</u> <u>Hobbs & Aubry,</u> <u>2007; Kerzner, 2003;</u> <u>Pellegrinelli &</u> <u>Garagna, 2009</u>)	Х	X	
	9	Provide a set of tools without an effort to standardize.	(<u>Hobbs & Aubry,</u> 2007; <u>Pellegrinelli &</u> <u>Garagna, 2009</u>)			
Multi-Project Management	10	Coordinate between projects	(<u>Hobbs & Aubry,</u> <u>2007</u>)	Х		Х

Group	Id	Function	Source	PMI (<u>Project</u> <u>Management</u> <u>Institute, 2017</u>)	PRINCE2 (<u>Alexos,</u> <u>2017</u>)	SAFe (<u>Scaled</u> <u>Agile</u> <u>Inc,</u> 2018c)
	11	Identify, select, and prioritize new projects	(<u>Hobbs & Aubry,</u> 2007; <u>Pellegrinelli &</u> <u>Garagna, 2009</u>)	Х		
	12	Manage one or more portfolios	(<u>Hobbs & Aubry,</u> <u>2007; Salameh,</u> <u>2014</u>)	Х		Х
	13	Manage one or more programs	(<u>Hobbs & Aubry,</u> 2007)	Х		Х
	14	Allocate resources between projects	(Bredillet et al., 2018b; Dai & Wells, 2004; Hobbs & Aubry, 2007; Kerzner, 2003; Pellegrinelli & Garagna, 2009; Salameh, 2014; Thiry & Deguire, 2007)	Х		Х
	15	Provide advice to upper management	(<u>Andersen et al.,</u> <u>2007; Hobbs &</u> <u>Aubry, 2007</u>)	Х		
	16	Participate in strategic planning	(<u>Hobbs & Aubry,</u> <u>2007; Salameh,</u> <u>2014</u>)	Х		Х
	17	Benefits management	(<u>Hobbs & Aubry,</u> <u>2007</u>)			Х
	18	Network and provide environmental scanning.	(<u>Hobbs & Aubry,</u> <u>2007</u>)			
Strategic Management	19	Monitor and control the performance of the PMO	(<u>Artto et al., 2011;</u> <u>Hobbs & Aubry,</u> <u>2007</u>)			
	20	Manage archives of project documentation	(Bredillet et al., 2018a, 2018b; Dai & Wells, 2004; Hobbs & Aubry, 2007; Kerzner, 2003)	Х	Х	
	21 22	Conduct post- project reviews Conduct project audits	(<u>Hobbs & Aubry,</u> <u>2007</u>) (<u>Hobbs & Aubry,</u> <u>2007</u>)			
	23	Implement and manage a database of lessons learned	(<u>Hobbs & Aubry,</u> <u>2007</u>)	Х		
	24	Implement and manage a risk database.	(<u>Hobbs & Aubry,</u> <u>2007</u>)		х	
Other	25	Execute Specialized Tasks for Project Managers	(<u>Andersen et al.,</u> <u>2007; Hobbs &</u> <u>Aubry, 2007</u>)		Х	

Group	Id	Function	Source	PMI (<u>Project</u> <u>Management</u> Institute, 2017)	PRINCE2 (<u>Alexos,</u> <u>2017</u>)	SAFe (<u>Scaled</u> <u>Agile</u> <u>Inc,</u> 2018c)
	26	Manage customer interfaces	(<u>Hobbs & Aubry,</u> <u>2007</u>)			
	27	Recruit, Select, Evaluate, and Determine Salaries for Project Managers	(<u>Hobbs & Aubry,</u> <u>2007</u>)			
	28	Project administrative support	(Andersen et al., 2007; Artto et al., 2011; Dai & Wells, 2004; Pellegrinelli & Garagna, 2009; Salameh, 2014)		X	
	29	Work-family equilibrium	(Aubry, Hobbs, et al., 2010)			
N . I I .	30	Developing the change management database	(<u>Bredillet et al.,</u> <u>2018b; Salameh,</u> <u>2014</u>)		Х	
Not Listed in <u>Hobbs and</u>	31	Portfolio problem solving	(<u>Bredillet et al</u> <u>2018b</u>)			
<u>Aubry</u> (2007)	32	Cost/benefit analysis of projects	(<u>Kerzner, 2003;</u> <u>Pellegrinelli &</u> <u>Garagna, 2009</u>)			
	33	Risk management	(Artto et al., 2011; Pellegrinelli & Garagna, 2009)			
	34	Project/program delivery management	(<u>Desouza & Evaristo,</u> <u>2006; Salameh,</u> <u>2014) ENREF 66</u>			
	35	Project management benchmarking	(<u>Kerzner, 2003</u>)			
	36	Managing stakeholders	(<u>Kerzner, 2003</u>)			

Appendix G Preliminary Survey

A survey was sent to agile coaches and agile transformation consultants within Accenture in the Netherlands. The survey consisted of a excel spreadsheet with the following fields.

- Case details
 - Company size (number of employees) Number of employees in the company
 - $\circ \quad \mbox{Industry Sector} \mbox{Business Sector: E.g. Software, Hardware, Retail, Banking, Insurance}$
 - $\circ \quad \text{Number of teams} \text{Number of Teams running Agile Methodologies}$
 - \circ Teams sizes Average number of employees working within each of these teams
 - o Project's size Average ballpark figures of the project's budget in this case
 - Documentation Description of the available documents on the case (E.g. Scrubbed project report, case description, project deck, videos)
- Agile Methodology
 - Framework used Which Framework or combination of Frameworks is used (E.g. SAFe, LeSS, SoS)?
 - Agile Maturity Level –.
- Change Management
 - PMO (Yes or No) Is there a formalized PMO (E.g. Center of Excellence, Value Realization Office)?
 - Corporate Sponsorship (Yes or No) Where did the support come from (E.g. C-level, Middle management)?
 - Agile Coaches? How many? Was there an agile coach? How many?

As the survey was intended to be a first glimpse on the possible cases available, data collection was not thorough. The respondents were asked to answer ballpark figures and assess business through their own perspective and memory. The results are available on

Case	Case detail	S					Agile Methodology		Change	e Management	
	Company Size	Industry Sector	Number of teams	Teams sizes	Project's Size	Documentation	Methodology used	Agile Maturity Level	PMO (Y/N)	Corporate Sponsorship	Agile Coach
1	10.000- 49.999	Commercial Airlines	10+	5	3 Million Euros	n/a	incremental, continuous integration	Emerging (3)	Yes	part of portfolio	0
2	10.000- 49.999	Telecom	8	5	10 Million Euros	n/a	holocracy, continuous, agile, scrum	Emerging (3)	Yes	C minus 1 level	4
3	10.000- 49.999	Capital Markets	5	10	2 Million Euros	n/a	waterfall	Ad hoc (1)	Yes	None, Project driven	0
4	10.000- 49.999	Energy Utilities	8	5	3 Million Euros	n/a	scrum, Kanban	Emerging (3)	Yes	part of portfolio	2
5	1.000- 5.000	Pension Services	10+	7	3 Million Euros	n/a	SAFe, scrum, Kanban	Emerging (3)	Yes	C minus 1 level	15
6	10.000- 49.999	Telecom	10+	7	5 Million Euros	n/a	SAFe, scrum, Kanban	Basic (2)	Yes	part of portfolio	15
7	100.000+	Aerospace	10+	7	10 Million Euros	n/a	SAFe, scrum, Kanban	Basic (2)	Yes	part of portfolio	10
8	100.000+	Steel producer	5	5	0,5 Million Euros	n/a	scrum, Kanban	Ad hoc (1)	No	part of portfolio	2
9	50.000- 99.999	Beverage producer	8	7	2 Million Euros	n/a	scrum, Kanban	Emerging (3)	Yes	part of portfolio	1
10	50.000- 99.999	Aerospace defense	14	7	5 Million Euros	n/a	tribes, scrum, Kanban, lean	Emerging (3)	Yes	C minus 1 level	12
11	50.000- 99.999	Petroleum	10+	7	20 Million Euros	n/a	scrum, Kanban	Basic (2)	Yes	C minus 1 level	25
12	5.000- 9.999	Heating systems	8	5	1 Million Euros	n/a	scrum	Ad hoc (1)	Yes	part of portfolio	1
13	n/a	Commercial airlines	2	6 to 8	n/a	n/a	scrum and Kanban	n/a	n/a	n/a	n/a
14	n/a	Telecom	3	6 to 8	n/a	n/a	Hybrid Agile	n/a	n/a	n/a	n/a
15	n/a	Beverages	n/a	n/a	n/a	n/a	Agile DevOps	n/a	n/a	n/a	n/a
16	45000	Banking	10	Release Trains (50-100 people)	5-20 Million Euros	Project decks, Reports on JIRA, Confluence	SAFe	Between Emerging (3) and Managed	Yes	Senior Mgmt., MDs	Yes, ongoing

Appendix H Full transcripts H.1 Case A H.1.1. Interview with the PMO Manager

wav.

Date: 19/08/2019 Recording: Windows 10 Recorder and Android recorder. Time: from 16:00 until 18:00 (UTC+01:00) Interviewer: Henrique Cleto Carneiro Location: Respondent's office. H.1.1.1. Transcripts 00:00:02 Interviewer: So first of all, I would like to thank you for participating in this interview. I would like to remind you that you can stop answering at any moment, even... Without even giving me a reason why. The interview is part of my master's Thesis Research Project on the changing roles of the PMO. And the goal of this interview is to capture your perception based on your experience. And in this case in particular. The data will be stored securely into TU Delft's data centre and it will be anonymized. So, if at any point we speak the name of the company, the name of other companies, or your name, the name of other people, when I'm transcribing this, it will be anonymized. You will have access to the transcripts so you can confirm if I did any mistakes or misconceptions and Validate the data if you have any questions, this is the best moment to ask. Respondent: 00:01:01 Oh, well usually they come afterwards, but well yeah, I'm interested in the subject, so I'm definitely interested in the outcomes of this research. So, we also you know, you said, and we have access to the transcript, but also your thesis will also be available to us in a new

Interviewer: 00:01:22 Yes. so, the data itself, the transcripts and, well basically the transcripts will always be private so it will never be disclosed. But the report and the analysis will be public at TU Delft as long as TU Delft exists so that it should be for a while. And after this I will organize a Webinar with all of the companies involved or probably a video. I like the idea of the Webinar so people can ask questions back, but I have to figure out a way. To do this privately. Yes, exactly. But it would be disclosed in some form the findings. Cause sometimes for most people the technical report is too extensive and too much.

Respondent: <u>00:02:14</u> Yes too much information. Good. But then you have to find out where to find the real information.

Interviewer: 00:02:24 I didn't even start writing about this and it's already 40 pages long, so it's very big. So that's what I'm intending to do. I would like to start with some demographic questions. I call them demographic questions, but how many people would you say that work in this company?

Respondent: 00:02:50 Thousands but I don't know exactly how many thousands. I think somewhere between 10 and 20,000, but I'm not sure.

Interviewer: <u>00:03:06</u> All right. How many teams work with agile methodologies?

Respondent: 00:03:11 A lot. Quite a lot. But you want to know a number.

Interviewer: <u>00:03:14</u> A ballpark number?

Respondent: <u>00:03:16</u> Well some, something about in... I think at least hundreds.

Interviewer: <u>00:03:24</u> Okay. What would you say is the average size of these teams? How many people?

Respondent: <u>00:03:31</u> I think between five and eight.

Interviewer: <u>00:03:37</u> And how would you describe your role at the company?

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Respondent:	<u>00:03:41</u>	I'm involved in the portfolio management part or the portfolio reporting part. And that mainly for the for the CIO area. And that's not only the CIO of the central part of the company, but also partly, yeah, things should happen in the CIO parts of the business units. So, that's the So, it's mainly the, just as I said. It's central, but also a bit about the business units at IT. Yeah.
Interviewer:	00:04:22	Yes. And the, I understand you call the PMO here CPMO, right?
Respondent:	00:04:27	yes, yes. Central PMO.
Interviewer:	00:04:29	All right. And how long have you been working here with CPMO?
Respondent:	<u>00:04:41</u>	That's actually quite difficult to say. Because, in this role I've been for two or three years now. So, that's it. But I've been part of the CPMO much longer. But then it's because this is a department and there are all kinds of functions. There's also the ones that are not strictly portfolio management. But it was more in the quality management part.
Interviewer:	<u>00:05:18</u>	Yes, yes. It would mean that you would be able to talk about the PMO both before, after and perhaps during the agile transition?
Respondent:	<u>00:05:28</u>	Yeah. Yeah. Well I Now of the real portfolio management part, but before I was close to the thing. So, I'd know, roughly, I know how it works before the agile transition.
Interviewer:	<u>00:05:46</u>	And what kind of agile methodology are in place in the, in the company.
Respondent:	<u>00:05:53</u>	We have the agile scrum that's most. And of course, there's also Kanban used. And there is a bit going on SAFe and LeSS, but those are more, well, we'll probably, we'll come to it later. Because everybody is trying to also make it get it to a bit higher level and, and do it, do it more. Right. Well, get it off the, the base team level, a bit more broad, more strategic level. But it is quite a struggle, I think.
Interviewer:	<u>00:06:44</u>	Why would you say that there's so many different methods being used?
Respondent:	<u>00:06:49</u>	Because it depends a bit on what people like. But that is also because you have business units which are quite independent in a way. So, the business units can decide which ways of working they have. But also, which is part of the agile way of thinking, is that you, well, you have your own way of working and you improve, improve on that. And if you want to go on a higher level and more towards your portfolio strategic level, then you choose a way of working or an approach that suits you best. So, one part of the company will think: "I think the SAFe approach is very good for us". So, they then take that and start improving on that. Another part is more likes more the LeSS approach than they go on that direction.
Interviewer:	<u>00:07:53</u>	So there is no standard on ways of working. It's up to the self-steering teams to figure out how they would like it best.
Respondent:	<u>00:07:59</u>	There is a bit of a standard, but it's well as it's agile that's sort of conflictual just pure standard. But there are some basics that are, that really need to be there. The mainly have to do with compliance, with the risk, things like that. Because you have to make sure that you don't lose on that.
Interviewer:	<u>00:08:28</u>	Is it part of the PMOS responsibility to set these basics, this basic standard of working or is it someone else's?
Respondent:	<u>00:08:40</u>	That's not, it's not part of the CPMO. Because it's current phase part of the, another department that are involved in the agile transition. But, still, in my former role as a quality management, that was 5 to 10 years ago, then we did try to get a sort of standard approach to agile, high level.
Interviewer:	00:09:12	So, it used to be part of the responsibility. And now it got redistributed.

Respondent:	<u>00:09:17</u>	Yeah, because. Because before, 5 to 10 years, or 5 years ago, which I spoke of, then there wasn't a total agile transition yet. So, then it was still a bit well, more individual initiatives to become more agile. So, then we, there was a central idea of really getting, it's a bit standardized. But then the real agile started and then, well then with agile you really have to do it agile. So, then you have to find your own standard.
Interviewer:	<u>00:09:58</u>	And what's this department that guides the transition?
Respondent:	<u>00:10:02</u>	There's a special initiative or in a program going on and they are involved in the agile transition. Partly. Yeah. Well, the part of the program management of that used to also used to be part of our team. But now it is separated.
Interviewer:	00:10:27	Alright. Is it better that it is separated?
Respondent:	00:10:31	It doesn't really. Depends a bit. I don't, well, I don't know whether it's better.
Interviewer:	<u>00:10:52</u>	Right. I mean, it's, is it a decision so that the people involved in this program don't have scope creep of other tasks and they can concentrate in that, the transition itself?
Respondent:	00:11:07	I think that's important because then they really have to focus on this show transition.
Interviewer:	<u>00:11:12</u>	All right. All right. So apart from standardizing ways of working, can you remember any other function that the PMO had that got redistributed? Or just dropped as well?
Respondent:	<u>00:11:30</u>	I think well we still do the reporting part. So, that's not registered widgets, but oh, I can't think of any real agile related functions that have been a really distributed since.
Interviewer:	<u>00:11:55</u>	So, but there were others that got redistributed not because of agile.
Respondent:	<u>00:11:59</u>	Although, well what'd you could think of is also that the program managers or the project managers that The, especially the, the larger projects, well, in an agile world there are supposed to be no projects, but just only the agile teams. So, then sort of these project managers and program managers became road managers. We call them. Because they manage the roadmap and that role did change and, but it's also said that you shouldn't have such a function like a program manager anymore. We now have those road managers. And so, there were a lot less of those people. There still are a bit, but it's more, there's supposed to be more with the, with business and with the strategic objectives they have. So, so that's, that's changed.
Interviewer:	<u>00:13:09</u>	But then you said that there are other reasons that tasks got redistributed. That is not related to agile. Would you remember which other reasons, what other changes have been happening at the same time?
Respondent:	<u>00:13:27</u>	Now there were a lot of changes around this agile transition. I think it's got much less centrally organized. If I go to the reporting parts, there used to be an old system of projects program steering that having to report all their progress on a quite detailed level. And that was processed centrally in our department. In the CPMO but then with this agile transition that was made much higher level. So that's, it went more to, well, then we focused more on the important projects and not on all but only on the important projects, important for the strategy. And also, because also larger ones, that's where the reporting goes on and it's more much more into high level rather than on the detail level. So, that is not in the nitty gritty detail.
Interviewer:	<u>00:14:47</u>	So, perhaps the projects with higher risk or higher capital to exposure to risk that gets attention or controlled.
Respondent:	<u>00:15:06</u>	They get more, more control, more attention by management and yeah, those with higher risk or important contribution to the business. But just the day to day things don't. Much more put into the DevOps teams themselves.

Interviewer:	<u>00:15:29</u>	It's somewhat of an information de-cluttering for upper management.
Respondent:	<u>00:15:38</u>	Yeah. And just focusing on the important parts and getting the information for that at a high level and not everything to the nitty gritty detailed.
Interviewer:	<u>00:15:53</u>	And what tasks that were not performed before it got picked up by the PMO?
Respondent:	<u>00:16:00</u>	This is difficult because it has only got less since. So, it's difficult to think of because Which ones where I think now we're more, the moment we are We go through cycles of course, but now we're really connected to the strategy we have as IT. And then we can relate a lot to that. And also, with the KPIs, et cetera. So, so that's become more. More clearly as management becomes more Previously it was small obviously because there was a lot of information then that was a huge field, it was very wide now it is more focused. And things like you mentioned the finance briefly. Well, what we do is not really related to We don't control the finance. That's a clear thing. It's put into another department or other sub department.
Interviewer:	<u>00:17:33</u>	And would you characterize any of this, a redistribution of tasks as a pain right now? That it was better for the business being done by the PMO.
Respondent:	00:17:52	That should difficult question.
Interviewer:	<u>00:17:53</u>	Quite sensitive probably.
Respondent:	<u>00:17:59</u>	Yes. It depends what perspective you take. If you look at from the perspective of the people that are working themselves, they all regard reporting and things like a hassle. So, they think that that if reporting becomes less than it's good. But still the management wants to know a lot and to know enough to take their decisions on. So, you do have to, to get information. So, the pain is your bed in that people that are working in that are more, they're doing the work and working very hard. They don't like to report, but in the end, the management needs to report. So that is a bit of a challenge always to, to get those two together.
Respondent:	<u>00:18:57</u>	So, and then also to make sure that you get the correct information, but you don't over ask the people that have to deliver the information. Because of course, you can also give me all the information you can give and then we can give that to management so that they can take the right decisions. But if you are pressing the workers to do show much than and we don't use it, that won't motivate them. And, by the way, it's also a waste of time then. So, so we also have to be very critical and what's to ask but still provide the management with the right information to take the decisions on. So that's, I think that's an, well the challenge we face.
Interviewer:	<u>00:19:50</u>	Balancing the needs and wants of Information.
Respondent:	<u>00:19:57</u>	And what also changes of course is that if you have those agile teams to work with their product backlogs, et Cetera, and then managed it well. But to get there, to really get the highlights out of it, that's not always very easy because all those styles very Just a small task they can manage, and they can do. But to get the large view of how well we are progressing related to all the strategic goals or development that isn't easily done in a way. So there has to be a sort of translation from all those little things that teams do and relate that to the larger goals that are there. And the tooling that is currently available for Agile and also the ways of working don't facilitate that really.
Interviewer:	<u>00:21:02</u>	So, in matching the KPIs of the teams with the business or strategic KPIs there, there's some translation gap.
Respondent:	<u>00:21:11</u>	Yeah. Then it's, Eh, well there's a gap and that has to be breached in a way, but it's difficult to connect the things at team level to the strategic.
Interviewer:	00:21:26	And who does this is the PMO?

Respondent:	<u>00:21:30</u>	Well basically the people who know best what's going on. I think the team should know, or the product owner should know because he or she has the best idea of what the team is doing and how that relates to the strategic goals. At least that's what it's supposed to be.
Interviewer:	00:21:56	And right now is it done, or it isn't? I didn't quite follow that part. You said it's a challenge but
Respondent:	<u>00:22:05</u>	It is done but I think it's some product owners can do that very well can translate that really good. In telling on these higher goals, we're progressing this way. And some others find it hard to get to that strategic level also translate that to the language that the management understands. Or that serves their perspective. Because they get caught up so much in their own area, that they lose the perspective people that are standing outside.
Interviewer:	00:22:53	And do you think that the PMO does have some responsibility on improving those relationships, or it should have, or it shouldn't?
Respondent:	<u>00:23:06</u>	Well, I think we have a certain responsibility or at least a role in that. On trying to get them to understand what is required.
Interviewer:	00:23:17	Alright. In a coaching, mentoring kind of way?
Respondent:	00:23:21	Yeah. On that kind of thing rather than controlling.
Interviewer:	00:23:30	Would that be the case before agile as well?
Respondent:	<u>00:23:34</u>	What it was before it went to agile. In a way, it's always was in When we had those projects, also people get up, get caught up in their own project. But it was a bit more clear, I think. Now because project has clear goals to go for and now you have those DevOps teams while they just go on and on. And then continuously adapt to what the needs are. Sometimes the risk is that they are drifting off, but there should be a real role of the Specialty of the product owner in that.
Interviewer:	00:24:26	So in constant delivery you end up alienated on the original goal.
Respondent:	<u>00:24:35</u>	Yeah, I think so. And then it's important that those teams really get updated on the strategic goals. And also, that they have a sort of, like SAFe says, that periodically they have a PI event or something that you know where you're going and set your goals for the coming period. Then at least you have a broader view.
Interviewer:	<u>00:25:09</u>	What would you say is the future of the PMO here? How, how do you think it's going to develop?
Respondent:	<u>00:25:15</u>	Of course I've don't know. But I think well we have always those wave forms. But like now we're a big getting out of the pure agile way of working a transition. And now people start feeling the need for some coordination, some relation to the strategy. So, I think there is a role in for PMO to maintain and to clarify that role between the strategy and what's being done and also to help in aligning those. So, I think that, sure that the way it will develop, I think won't be like it used to be that it's very much into the details and making sure that all the forms are filled will be more on high level.
Interviewer:	<u>00:26:22</u>	Okay. I have two more, but one of them is quite extensive. Defining roles is a very complicated thing because different people might say that the role is job description. People can say that the role is a function, is a task. Or as we use here a few times a day it's whenever we have shared responsibility over something, and we say that someone has a role to play in that something.
Respondent:	00:27:00	Yeah.
Interviewer:	<u>00:27:01</u>	So coming up with the definition of what is the role and how does it change for the PMO was quite hectic. But I got this far so bear with me for a very little moment. I make this

analogy with stories. So, if you have a very simple story, you're going to have a main character with the main role and supporting characters with supporting roles. The main character drives the story to the end with his role and the supporting characters make decisions.

Interviewer: <u>00:27:32</u> They influence the environment in which the main character is developing the story. If this story complicated enough you can never tell who's the main character and who is the supporting character because they change places in different moments of the story. So, my analogy goes to the firm is a very complicated story. It's so complicated that it doesn't make sense on saying that there is a main role and supporting roles. Even though I propose the supporting role here. But there are different roles. And some of them are associated with the PMO in literature. They would be the coordinating role, the controlling role, the supporting role and the servicing role. Coordinating is managing inter-dependency and resource management. Controlling is measuring, reporting, supporting is delivering very specific services to different units, that only the PMO has the expertise to do so.

Interviewer: <u>00:28:42</u> And in face of these roles and your experience, I have this other list that's even longer of the functions that are usually attributed to the PMO. This is based also on the literature research. And what I would like you to do is to take a look as these functions, there are 36 of them and tell me comparing it before the agile transition and now. How related these functions are to the PMO. So, five would be this is a core function of the PMO and one, this is something that we do but not that important. And sometimes it has no place on the PMO at all. So, there is NA non applicable. And if you could do that, while are also telling me what's the role that the PMO has in that function.

Respondent:	<u>00:29:45</u>	Oh, okay. Yeah.
Interviewer:	00:29:45	Both before and after I would have a magnificent dataset.
Respondent:	00:29:52	That's all the, I see a lot of axis' here.
Interviewer:	00:30:07	It's going to do fantastic to try to block this thing.
Respondent:	00:30:13	And so well, detail question: a project, do you mean a project or program or does that
Interviewer:	<u>00:30:22</u>	Sometimes it's projects, sometimes it's program here. So, in this case it would be a project. But if you would like in do that, one in particular has no program on it. So, we feel like answer it as a program just write a comment here. So, I know afterwards when I'm analysing it.
Respondent:	<u>00:30:44</u>	Okay. And then I can put some comments too. Like this first one, report project status to upper management. Well that's still, is it both? It's important, I think. But it changed from all projects to main programs
Interviewer:	00:31:27	And then it is done in a controlling role.
Respondent:	<u>00:31:31</u>	Yeah, I think it is. Let's see, yeah. the controlling role. That's both controlling. This monitoring of a control project. That can be both controlling and supporting. It also is could also be supporting.
Interviewer:	00:32:02	From what you told me now who does this is the teams, right?
Respondent:	<u>00:32:06</u>	Yeah. This is more the, of the project itself. So, that mostly lies with the teams themselves. Although the monitoring part, we do some monitoring, but that is more in the idea of this reporting.
Interviewer:	00:32:26	of the other one before.

Respondent:	<u>00:32:29</u>	Yes. Like if Well, an example if I have a lot of systems to decommission, of course these teams are charge of the decommissioning, those all those systems. But we do have an aggregated view of how the decommissioning is going. And we tried to get that visible. I don't know how to show that's part of the monitoring. I think
Interviewer:	00:33:01	So I would say controlling then based on this definition.
Respondent:	<u>00:33:03</u>	Yeah. So that used to be before, but it's, it's not if, well first it's not the main, it's not the onlyIt used to be about this, I think. It should be It is a bit less, I think. Because mainly lies with the with team themselves and then it just controlling. That could also be Oh no, this is more the coaching and transferring.
Interviewer:	00:33:50	Yes.
Respondent:	00:33:59	Implement and operate a project information system. What can I think of such a thing?
Interviewer:	<u>00:34:09</u>	That would be a repository where the data is kept that they share information. For instance, Microsoft SharePoint.
Respondent:	<u>00:34:17</u>	Oh, okay. So that's, no, no, it's not. Yeah. Well, it is not a responsibility, not before. Not after.
Interviewer:	00:34:26	And so would you say non-applicable or?
Speaker 5:	00:34:29	I think at the moment maybe there was a bit of, oh no, ruining your firm.
Interviewer:	00:34:40	No worries. I'm here and it's being recorded so I can remember.
Respondent:	<u>00:34:45</u>	It's this one. I think because it was a bit of a Before they tried to do it a little bit on doing that, but mainly it was somewhere else. But now it is hardly. We do have a tiny little one. And that's because it's sharing information it has something supporting characteristic.
Interviewer:	00:35:15	Yes.
Respondent:	<u>00:35:19</u>	Developing and maintaining a project scoreboard. I think that used to be more, although it wasn't entirely the responsibility of team,
Interviewer:	00:35:31	it was shared with someone else,
Respondent:	<u>00:35:33</u>	but it was also shared by without us. Yeah. Because it had to maintain by the project itself as well. So, the main responsibility for it lies with the team, with the team itself. But then the CPMO did have a role on that. And now it's less of that. Depends kind of what's sort of few you have of that. But we do have a sort of a project score board if you think of that. And that's just an overview of the important projects with their status, red, amber, green. And what is the key messages? So that is a sort of a project scoreboards. Or is it Does that suit your
Interviewer:	00:36:33	Yes, that is part of a project scoreboard.
Respondent:	00:36:36	So them we do have this.
Respondent:	<u>00:37:17</u>	And I think if we have this it's a controlling role. Develop and implement the standard methodology. Well that's used to be mainly with this team. But now, which, Eh, well what's done with methodology. The standard methodology is that the project management standard?
Interviewer:	<u>00:37:48</u>	Yes, yes.

Respondent:	<u>00:37:50</u>	Oh, that's not much, well hardly. Just a little bit more than a quality part. Because we do maintain some the quality. Yeah. And then it's probably more the supporting or the Yes, I is a supporting role, I think. And it used to be a bit more controlling. Enforcing project management standards. And now it's now only supporting. Promote project management within the organization. Well, that's used to be part of the team. Not entirely only. But, at the moment it's not anymore. That sounds like controlling, well or maybe a bit supporting. No, no, not really. develop competency of personnel including training. What kind of competency do you mean?
Interviewer:	<u>00:39:11</u>	Whatever they need, whether it was a new certification, they need better public speaking, storytelling. Yes. And soft skills. Hard skills.
Respondent:	<u>00:39:26</u>	Yes. Yeah. Oh, that's not applicable. Then provide mentoring for project manager. I think it was done a little bit. Yeah, it was done a little bit. Now it is not applicable.
Respondent:	<u>00:39:51</u>	And that was supporting, serving. It could be as a form of training.
Respondent:	<u>00:40:06</u>	Provide a set of tools without an effort to standardize.
Interviewer:	<u>00:40:14</u>	So if a team needs something a new software, they need anything for working. But it's not related to "we need to do it this way". Oh, the company uses this software. Is that they need an extra wish and they go to the PMO to ask for it.
Respondent:	<u>00:40:39</u>	Well it was. If you think of it bit wider and then you could say it is part of the quality part. When you provide some template on ways of working or things like that.
Interviewer:	00:40:58	So that would be standardizing it, right?
Respondent:	<u>00:41:00</u>	Yeah, yeah, sure. Okay. But if just tools, this was not applicable right? It lies with other groups. Coordinate between projects. Oh, it's basically mainly of course the responsibility of the projects themselves or of the program.
Interviewer:	<u>00:41:23</u>	Yes. This is more a program view. It's multiple projects.
Respondent:	<u>00:41:32</u>	Then it lies with the program manager, which is the same before and now.
Interviewer:	<u>00:41:37</u>	All right. And he's not part of the CPMO.
Respondent:	<u>00:41:42</u>	Well actually the program managers used to be part of CPMO and, well, now they're called road managers. So, they are still on. But it's not of all project managers. So not all the program managers. But the actual coordination wasn't part of the CPMO. So, I think I'll put a non-applicable.
Respondent:	<u>00:42:08</u>	Identify, select and prioritize new projects. No, no, I think that wasn't Now it's not applicable. Just thinking whether it's used to be part of that. I could be a bit, I'm not certain. That it wasn't, at least it wasn't a very obvious role. And then it would be something like the coordination part.
Respondent:	00:42:57	Managing one or more portfolios and you mean portfolios of projects or portfolios of business units?
Interviewer:	00:43:07	That actually depends on how you are organized.
Respondent:	<u>00:43:11</u>	Yeah. the actual managing was I think it was part of, you know, we do want it to be part of it. Yeah. If you think of portfolio management then we do want to upgrade that a bit. So, it's in here a bit. But we wanted it to grow. So, I'll put it on one.
Interviewer:	00:43:46	That is what you mentioned on what you see the future of the PMO being.

Respondent:	<u>00:43:48</u>	Yeah. Yes, yes. That's where you have more management on the portfolio. And it used to be a bit more not really. Yeah. On the real level because the real management of the portfolios lies more with the portfolio boards. And then the CPMO had a role in just feeding the portfolio boards. But the fully responsibility lies with them. So, a coordinating role? Or controlling?
Interviewer:	00:44:29	You fed information so them, is that it? So, it's more controlling.
Respondent:	00:44:34	Then it's more the controlling part. You want more to go to the coordinating part.
Respondent:	<u>00:44:47</u>	Managing one remote more programs. Now it definitely was part of the CPMO. As one of the subgroups were the program managers. So, then it's a put it on five and now, well, actually there are still some road managers, program managers part, but it's less prominent. So, I'll put It on this one.
Speaker 5:	<u>00:45:26</u>	Well there's more also as a sort of service that it is done. I think. And also coordinating of course. Allocate resources between projects. Now that was not the case is not at the moment. Oh yes. Manage more or more programs. I think that was also short of service and coordination because also.
Respondent:	<u>00:46:11</u>	Provide advice to upper management. It should be like that and a bit more than it's now. Put it on this. Show that on the that. Yeah, I think the supporting. Yep.
Respondent:	<u>00:46:38</u>	Participate in strategic planning. At the moment we don't participate or hardly participate in strategic planning. so, I'll put it on one. It used to be a bit more, although, well What it was about six years ago and then deteriorate it right? So
Interviewer:	<u>00:47:11</u>	It used to be done before but not now.
Respondent:	<u>00:47:17</u>	Yeah, no, put it on this one and it's now still it is a bit, but it won't be very much. And a bit of a controlling part, isn't it? Or not may still the coordinating.
Interviewer:	<u>00:47:35</u>	It could be coordinating, could be supporting it could be servicing. It depends on how are you doing this? How active was the role?
Respondent:	<u>00:47:44</u>	I think it's more in the It's more the supporting part. I think.
Respondent:	<u>00:48:04</u>	Benefits management It's a difficult thing. Because I know there was always all the projects and programs had to also to go on how are my benefits being achieved? Is always difficult for a program or project that it will wait, it goes on and, on this project, and then it's finished and only then the benefits start coming. You should be then the program is gone. And you can't see the benefits anymore. But nobody sees the benefits. The benefits are maybe there, but then there's no tracking of it anymore. So, the benefits tracking. Well we don't, we don't do it now. We didn't.
Respondent:	00:49:09	Network and provider from an environmental scanning. This sounds very technical
Interviewer:	<u>00:49:18</u>	Maybe it is poorly phrased, but it's stakeholder mapping, stakeholder mapping, finding out who was involved and how was the climate?
Respondent:	<u>00:49:44</u>	So that was small. Hardly. Or not. Not Actually, it's not. Only of course, if somebody from the CPMO as a project manager has a problem to manage, then of course they have to do it. That is one of the most important parts of a program to manage all the stakeholders.
Interviewer:	<u>00:50:11</u>	Okay. But, managing stakeholders is in another function. So, this is just scanning.
Speaker 5:	<u>00:50:16</u>	Yeah. But then, Eh, if you have a program, if you're doing a program from, well as a program manager, you have to know, of course she has to do this. But it's not the specific task of the CPMO only if you're in the role of project management.

Interviewer:	00:50:39	So it is a thing that you'd have to do, but it's not a core function.
Respondent:	00:50:43	No. It is not a core function.
Interviewer:	00:50:43	So it will rank one or two.
Respondent:	<u>00:50:47</u>	Yeah. Show then it's a Well put it, put it on one, then it's on the map at least. And then it was just well, sort of a supporting I think so.
Respondent:	00:51:06	Monitoring control the performance with the PMO. Itself?
Interviewer:	00:51:10	Yes. Yes. Self-evaluating.
Respondent:	<u>00:51:14</u>	No, of course we do. That should be on, on a five always.
Interviewer:	00:51:23	I don't know. It's not, the reason that the PMO exists.
Respondent:	<u>00:51:26</u>	No, no. Shouldn't be, but it should be important. And especially in the agile world. But I'll put it on one because it's only a short task. It is applicable, but it's not the most important part. Mainly supporting, I think.
Respondent:	<u>00:51:55</u>	Manage archives of project documentation. At least now it's not. Very little bit, I think. Just for Supporting or servicing.
Interviewer:	<u>00:52:31</u>	Just to be sure. Do you have a hard stop at five or is there some leeway?
Respondent:	00:52:39	No. Well I'll manage but I don't have very much time.
Interviewer:	00:52:43	It's just this one and the final question.
Respondent:	<u>00:52:46</u>	Yeah. Okay, sure. That's okay. Conduct post project reviews? Well definitely not going to do that today. Maybe there was a sort of no, that wasn't your role before. The project audits yes. That was It is not at the moment and it used to be part but only, but not very prominent. I will put it like this.
Speaker 5:	<u>00:53:22</u>	And then it's which way? Controlling, but that could also be a supporting. Then you wanted to transfer knowledge also. There are ways of doing it. Implement and manage a database of lessons learned?
Speaker 4:	<u>00:53:46</u>	Well, we don't do that at the moment, and I don't think it was there before. Implement Which isn't to say, by the way, that it shouldn't be. But then it wasn't done. Implement and manage a risk database. Well, it's not part of our CPMO. But, but it's there of course. But that is not a part of CPMO. Execute specialized tasks for project managers. Yeah. Of course. Project managers do that. They're a part of the team or you mean
Interviewer:	<u>00:54:31</u>	Sometimes they need something else, like a cost benefit analysis that. Something that the PMO has expertise to do and maybe that you go to the PMO.
Respondent:	<u>00:54:46</u>	Oh yeah, No things like the business case.
Interviewer:	<u>00:54:51</u>	Some cases have it, but not everyone has it.
Respondent:	<u>00:54:55</u>	Yeah. Well I think it was done as a support. Oh, sure. Yeah. More servicing.
Speaker 5:	<u>00:55:09</u>	And no, it isn't done at the moment. Manage customer interfaces. It's not done. Customer you mean a customer off the, the teams, the project,
Interviewer:	00:55:24	Sure. Their clients. Could be internal or external. Depends on the business.

Respondent:	<u>00:55:33</u>	No, it's not. Salaries for project managers now. It wasn't and it is not. Project administrative support. Well, if I look to the CPMO, that was not a, well it definitely is not at the moment, but it also wasn't as, as a CPMO. But there were some areas in the company where a PMO was supporting
Interviewer:	<u>00:56:10</u>	There was a distributed PMO with the central unit and smaller units and the smaller units we do administrative work.
Respondent:	<u>00:56:19</u>	Yeah. Yeah. Like if you have a very large program, there is sometimes she was a dedicated PMO for that and that did a lot of administrative things for the project to program itself. But we as a CPMO didn't do that because it was with the project itself. So
Interviewer:	<u>00:56:43</u>	So now you've got me. Yeah. So, the table was not designed for this design of the PMO. More concentrated perhaps. I'd put non-applicable.
Speaker 4:	<u>00:57:01</u>	I'll put it in the not. Regarding the central PMO being
Respondent:	00:58:15	Developing the change management database. What do you mean by that?
Interviewer:	<u>00:58:22</u>	So tracking the changes that happened in the business and how the risks, so being coped with a what are the impacts.
Respondent:	<u>00:58:35</u>	So I'm sort of thinking a bit because we do. If you see what happens, if you look at a very high level, we do have a sort of a database of which changes are going on. And whether there are risks involved.
Interviewer:	00:59:00	But it's within the scope of the PMO?
Respondent:	<u>00:59:03</u>	It's yeah. It's within the scope of the PMO. But the responsibility of course for filling it lies with the product owners. But we do develop this sheet from the perspective. Then it's definitely, part of it. Sure. It was, that's more the controlling thing.
Interviewer:	<u>00:59:29</u>	I think it is the servicing as well. Because it's specialized thing to develop the database [inaudible]
Respondent:	00:59:37	Oh, okay. And it could be that. Portfolio problem solving. What do you mean by that?
Interviewer:	<u>01:00:01</u>	Sometimes you have issues with the portfolio and some projects are not going as fast as they should or the reporting side. Optimal. There are some problems in the way that projects have developing within portfolio or communications is going out and who's solves these problems takes the barriers out is the PMO.
Respondent:	<u>01:00:28</u>	Oh, okay. Sure. Well if we're doing like that then it is only supportive. We don't really do it, but you can direct a bit. Yeah. But on a low level, either a one or a two. Put it on this one. Cost benefit analysis of projects, we don't do that at the moment. Only in a conceptual way but not in the financial way. And it used to be a little bit. I think. Risk management, well we do keep track of the risks, the important risks that are signalled or the impediments in the agile world. They are, we are aware of them or we try to make them visible and also. But we don't do the management themselves. Only that we support people or say no. And things like that. So, supporting role. And it also use be like that, so I'll put it on, two, one. Project, program delivery management? You mean the actual execution of a project or program?
Interviewer:	01:02:12	No, it's a tracking the delivery see if it is on time, it made the standards, quality standards.
Respondent:	<u>01:02:23</u>	And that's definitely shorter for controlling part, but it's maybe. It's used to be a bit more, I think. But it is now a bit. Project management benchmarking used to be also a bit more and it is not at the moment. And that's the In a supporting way I think. Managing stakeholders. Well, the actual management is not in, but so no, I think put it on.

Interviewer:	<u>01:03:19</u>	Okay. The last question I have for you then, is there anything, I didn't ask you that you think is fundamental for understanding the PMO here?
Respondent:	<u>01:03:39</u>	It's always difficult. What you didn't ask, what you should have asked.
Interviewer:	<u>01:03:48</u>	Maybe I overlooked something that is very important.
Respondent:	<u>01:03:56</u>	Curious about is the influence of the all those models, like SAFe and LeSS, what the kind of influence they will have on the way PMO works. Like, well, giving an example. There was part of the company was implementing SAFe. They were doing an agile transition also going SAFe, so we have the coordination. But then I came across it in a way they still did the PMO in the same way. Like they had forms with all this with all the four for every project or they're then called it in epic. When you have to fill out the forms, I think it's about the forms you had to fill out before to get started and things like that. So that made me also think, well that's, well it's in a way it's SAFe, but it's still the old way of thinking. And I think Well, it goes with the agile transition that people start getting a bit at allergic to any kind of standardization. So, then you usually go through a sort of a cycle that first people say: "well, we had the old way of working and now we got agile. So, we forget everything. We will just find it out ourselves." And then, and now they're gradually going back because. Well, you do have to meet some standards. At least the external standards that are set by the regulators. And then it helps if you have a quality system, if you have things available. That you don't have to reinvent the wheel every time. But I think, well that's goes for our case that we're in this cycle somewhere. But I think that also applies to the other companies. But I'm not sure.
Interviewer:	<u>01:06:27</u>	I see. The cycles is from really wanting to standardize, no standardization and maybe the extremes get closer at each cycle and hopefully eventually you land into a conversion path.
Respondent:	<u>01:06:45</u>	Yeah. Somewhere, somewhere in between where people can work agile and there's lot of freedom to adapt. But still you still meet all the things that are really necessary. There's always, I've seen that a number of times in this company, but also elsewhere. That there's always this balance going this way and that way. Then everybody goes into PRINCE2. And Then the theory of constraints. We have had them all.
Interviewer:	<u>01:07:28</u>	There is actually one school of thought that says the firms change in waves of rationality, that there's always an effort to rationalize the work that is been done. But this theory is particularly grim because they say that there is no rationality. Rationality is a myth. And then someone will have an idea to implement a method, a new tool and everyone will go through the same cycle. Euphoria, this is the best tool we can implement, then actually implementing then disappointment because the tool will always fail to deliver what was promised. Until the next wave comes again with euphoria,
Respondent:	<u>01:08:26</u>	Then you have a new tool and then yes I can recognize that.
Interviewer:	<u>01:08:34</u>	They say that this will always keep happening because there is no stability on rationality,
Respondent:	<u>01:08:41</u>	No. And there's also no one size fits all. That is also what's always the problem. You can have very large or rigorous program methodologies, but they don't fit all programs. So, then of course there's need to have something different and then you've come to something like agile. That works pretty well for a part. And then everybody wants to go agile.
Interviewer:	<u>01:09:18</u>	There also one of the big criticisms to evidence-based management. In the sense that we're going to implement this because it's a proven solution and it works. But there's no way you can guarantee that because it works for that case it will work again. Yeah. Even if it's in the same companies, it's not because it worked for us before they work again.
Respondent:	<u>01:09:40</u>	No, not at all. You can't ever say that all the circumstances are actually the same. The people will be different, or the product will be different or there is an evolution going on. So, I think that in a few years' time we will have something different that has a bit of agile aspects, but also some other aspects. Maybe there stands the holy grail.

Interviewer:	<u>01:10:11</u>	Or maybe something completely different.
Respondent:	<u>01:10:13</u>	It could very well be, but still change also makes you sharp and then you can decide on what to do what's important for you and what works. And then well, change is the constant.
Interviewer:	<u>01:10:34</u>	I think I have all the data that I needed. I'm going to stop recording now.

H.1.1.2. Survey Responses

Group	ID	Function	Period	Value	Role
Monitoring and Controlling Project Performance	1	Report project status to upper management	0: Traditional	5	СТ
			1: Agile	5	СТ
	2	Monitoring and control of project performance	0: Traditional	4	СТ
Cont			1: Agile	3	СТ
Monitoring and Con Project Performance	3	Implement and operate a project information	0: Traditional	1	SP
erfo		system	1: Agile	1	SP
nitor ect I	4	Develop and maintain a project scoreboard.	0: Traditional	4	СТ
Mor Proj			1: Agile	4	СТ
	5	Develop and implement a standard methodology	0: Traditional	5	CT, SP
men			1: Agile	1	SP
Development of Project Management Competencies and Methodologies	6	Promote project management within the	0: Traditional	4	СТ
Mar odol		organization	1: Agile	1	СТ
ject j	7	Develop competency of personnel, including	0: Traditional	NA	
Proj nd N		training	1: Agile	NA	
it of es ar	8	Provide mentoring for project managers	0: Traditional	2	SP, SV
mer			1: Agile	NA	
elop 1pete	9	Provide a set of tools without an effort to	0: Traditional	NA	
Dev Con		standardize.	1: Agile	NA	
	10	Coordinate between projects	0: Traditional	NA	
			1: Agile	NA	
	11	Identify, select, and prioritize new projects	0: Traditional	1	CR
ent			1: Agile	NA	
geme	12	Manage one or more portfolios	0: Traditional	2	СТ
anag			1: Agile	1	CR
Multi-Project Management	13	Manage one or more programs	0: Traditional	5	CR, SV
rojec			1: Agile	4	CR, SV
ti-P ₁	14	Allocate resources between projects.	0: Traditional	NA	
Mul			1: Agile	NA	
	15	Provide advice to upper management	0: Traditional	4	SP
			1: Agile	3	SP
	16	Participate in strategic planning	0: Traditional	3	CR, SP
ant			1: Agile	1	SP
çeme	17	Benefits management	0: Traditional	NA	
anag			1: Agile	NA	
c Mi	18	Network and provide environmental scanning.	0: Traditional	1	SP
Strategic Management			1: Agile	1	SP
Stra	19	Monitor and control the performance of the PMO	0: Traditional	1	SP

Group	ID	Function	Period	Value	Role
			1: Agile	1	SP
	20	Manage archives of project documentation	0: Traditional	1	SP, SV
			1: Agile	NA	
	21	Conduct post-project reviews	0: Traditional	NA	
			1: Agile	NA	
	22	Conduct project audits	0: Traditional	2	CT, SP
			1: Agile	NA	
	23	Implement and manage a database of lessons	0: Traditional	NA	
		learned	1: Agile	NA	
	24	Implement and manage a risk database.	0: Traditional	NA	
			1: Agile	NA	
	25	Execute Specialized Tasks for Project Managers	0: Traditional	2	SV
			1: Agile	NA	
	26	Manage customer interfaces	0: Traditional	NA	
			1: Agile	NA	
	27	Recruit, Select, Evaluate, and Determine Salaries	0: Traditional	NA	
		for Project Managers	1: Agile	NA	
	28	Project administrative support	0: Traditional	NA	
			1: Agile	NA	
	29	Work-family equilibrium	0: Traditional	NA	
			1: Agile	NA	
	30	Developing the change management database	0: Traditional	4	SV
			1: Agile	4	SV
	31	Portfolio problem solving	0: Traditional	2	CT, SP
			1: Agile	2	CT, SP
	32	Cost/benefit analysis of projects	0: Traditional	1	CT
			1: Agile	NA	
	33	Risk management	0: Traditional	2	SP
			1: Agile	2	SP
	34	Project/program delivery management	0: Traditional	2	СТ
			1: Agile	1	СТ
	35	Project management benchmarking	0: Traditional	2	SP
			1: Agile	NA	
ы Н	36	Managing stakeholders	0: Traditional	NA	
Other			1: Agile	NA	

H.1.2. Interview with Program Manager

Date: 19/08/2019 Time: from 10:00 until 11:00 (UTC+01:00) Location: Respondent's office.

Recording: Windows recorder and Android recorder. Interviewer: Henrique Cleto Carneiro

H.1.2.1. Transcripts

Interviewer: <u>00:02</u>

Perfect. Well I'd like to start with some demographic questions, as I like to call them. And how many people would you say that work in this company?

Respondent:	<u>00:15</u>	Couple of thousands. I know, I'm not sure, but I think seven or 8,000.
Interviewer:	<u>00:24</u>	And how many teams would you say work with agile?
Respondent:	<u>00:30</u>	I think about a hundred Something like that. A lot of teams. So, in the CIO and in the business.
Interviewer:	<u>00:45</u>	And how would you describe your role in the company?
Respondent:	<u>00:50</u>	Specially for the CIO office, so to that part we do the Making the reports to make clear what we are doing now. And we are going to how would the depends, how is the relation with the strategy. That is a little bit missing now. It's just growing and it's becoming better and better.
Interviewer:	<u>01:19</u>	But why would you say that it's missing, it's because of some recent change or it has always been missing?
Respondent:	<u>01:31</u>	In the COMPANY it's always been For a couple of years, I am by COMPANY, it's just missing because portfolio management and agile wasn't fit together. So, portfolio management was more structured as PRINCE2, waterfall, and every team was changing to Agile. And they forgot to do a couple of things.
Interviewer:	<u>02:08</u>	So you're saying that portfolio management is now the new interest of the PMO?
Respondent:	<u>02:14</u>	Yeah. We have started it again and before this, before I was involved, it more reporting and now we are going to more in in out to be looking for the programs to also strategy. Yes. And how they're, how are the projects developed also for the strategy. Fit they to the strategy and what are they doing to go better, or can we stop the project because aren't there.
Interviewer:	<u>03:00</u>	So aligning the directions in which teams are working with the overall strategy of the group?
Respondent:	<u>03:05</u>	Yes. This very difficult because this is very big. And in agile, a lot of people think we don't have to report, we don't have to say what we are doing and yeah We do every two weeks after the sprint we do a demo. So, when you want to know what we're doing, go to the demo. Yes. But that is not working for that many teams. Our direction cannot walk to one hundred teams to go to see what they are doing. We are too big for that kinds of stuff.
Interviewer:	<u>03:45</u>	If you would do that, you have to spend your whole working hours going to demos.
Respondent:	<u>03:49</u>	Yeah.
Interviewer:	<u>03:51</u>	Okay, perfect. Well you said you recently involved with the PMO; you were not before the agile transition?
Respondent:	<u>04:00</u>	No, because I'm from ACQUIRED COMPANY, so it got bought by the COMPANY. And I first go to help to the integration, to help them with tools. And how do you do portfolio management of: what can you do? So, my first task was specifically the tools. What can you do with the tools? Yes. And the last couple of months since January I'm, EMPLOYEE, you'll speak with EMPLOYEE this afternoon to get a better PMO and better portfolio management in CIO and more form a lot reporting a bit more yeah. That you can manage it by do we reporting that is something you can use for management. Then you want to see what's are, what are we all doing. The agile teams, et Cetera. That's also the projects, the programs and every activity and how they compare to the strategy.
Interviewer:	<u>05:17</u>	All right, fine. So, you mentioned two things. You mentioned that the PMO, now does a lot of reporting because managing one hundred teams requires this. So, it, even though it's an agile this is the thing that probably they did before the transition and they still doing.
Respondent:	<u>05:38</u>	Yeah, there's a lot to doing.

Interviewer:	<u>05:40</u>	Yes. All right. And that portfolio management was a thing that was dropped with the agile transition.
Respondent:	<u>05:50</u>	Now it's was dropped before the transition because before the transition it was also already low. Just reporting and that was it. In the ACQUIRED COMPANY, I was used to do portfolio management more like we are going to do it now. So, they did just the interaction between project managers with the teams and the you had to know what is strategy. And are the relations in the programs et Cetera. So, you can advise the board of what's happening and what are you doing.
Interviewer:	<u>06:32</u>	Just going back at this, so I understand that in ACQUIRED COMPANY. Also, I should mention this. Whenever we speak the name of the company, your name and the name of anyone else I will anonymize this when I'm transcribing the text. So, we don't need to worry about it. So, at the ACQUIRED COMPANY you had portfolio management function.
Respondent:	<u>07:00</u>	Yes, it was in place and it was working.
Interviewer:	<u>07:00</u>	And three, four, three years ago before the COMPANY had implemented agile in that many teams. Was there, a portfolio management. [cross talk]
Respondent:	<u>07:14</u>	Before that there was portfolio management, but they were losing it in the agile time.
Interviewer:	<u>07:19</u>	Yeah, yeah. So that would be one function that was done before and now we're missing.
Respondent:	<u>07:27</u>	They lost thinking is this necessary in the agile world.
Interviewer:	<u>07:32</u>	Is there anything that, any other function that comes up to your mind that went through a similar process? It was an important before, it was dropped, and you miss it.
Respondent:	<u>07:46</u>	You see it also kind of with, the security and the risk management. Because agile teams are doing, they, they're doing the right things. That's not a problem, but they are doing the things for the clients, et Cetera. But risk management, portfolio management and stuff behind isn't the first focus for the team. So, they forget to do it. And then, after a couple of years then you see we're missing something. And now you see that they're starting up that kind of task. And you also have to say it's a part of what the team have to do, they have to do good risk management. They have to do dad that, that, that a lot of things also. And not only the stories for the business.
Interviewer:	<u>08:53</u>	And would you say that they don't do it because of lack of knowledge or lack of time?
Respondent:	<u>09:02</u>	Both.
Interviewer:	<u>09:03</u>	Both. And is it the role here? Is it a function of the PMO here to train people to do it?
Respondent:	<u>09:10</u>	No.
Interviewer:	<u>09:10</u>	No. Was it before?
Respondent:	<u>09:14</u>	No. But are only when we see it you can say you have to do that also, but before you have to have the knowledge of the project.
Interviewer:	<u>09:24</u>	Yes. Then you need the reporting.
Respondent:	<u>09:27</u>	And that you can see the reporting and there you could say, you I'm missing this and this. Yes. How are you doing that? And then they say, oh, we do. We don't do it. Thank you. Say you have to, or they say yes, we do a bit just in the excel and then we write everything up. Okay. But for the Nederlandse Bank et Cetera, you have to prove what you are doing. For risk management, et cetera. A lot of things. You

Interviewer:	<u>09:57</u>	That's the regulator?
Respondent:	<u>09:57</u>	Yeah. You have to prove that you're that you are in control. So, something in excel not good enough. You have to do it in iRISK, the tooling be do risk management in. And you have to prove it in that tooling that you are in control.
Interviewer:	<u>10:19</u>	And there is some level of transparency with the regulator.
Respondent:	<u>10:24</u>	And the first time it scales down, because then it was good. So, it keep a time good. But then you are not doing it. And after a year, two years then you have a lack. People doesn't know anymore.
Interviewer:	<u>10:38</u>	So you need to constantly be updating.
Respondent:	<u>10:43</u>	Yeah.
Interviewer:	<u>10:44</u>	Okay. So, we talked about two big functions that got dropped and now you're trying to pick it up.
Respondent:	<u>10:50</u>	It was not completely dropped. Reduced, and reduced too much.
Interviewer:	<u>10:55</u>	Yes. Are there any functions that got picked up that were not done before?
Respondent:	<u>11:08</u>	I don't know. What you see people are more involved. The soft skills, you see improvements.
Interviewer:	<u>11:23</u>	There isn't anything that the PMO started doing now that they didn't do before?
Respondent:	<u>11:30</u>	No, just the two things.
Interviewer:	<u>11:33</u>	Just stopped doing. Alright, perfect. That has actually been quite clear and much faster than I expected.
Interviewer:	<u>11:54</u>	Well I have two questions for you now. And we're going to actually solve this in much less time than I had planned. First of all, I, besides the agile transition, that happened here was there any other organizational change or transition in place?
Respondent:	<u>12:16</u>	Yeah, a lot for changes because we, for the normal business is ruining and the changes,
Interviewer:	<u>12:24</u>	So it is a very dynamic business.
Respondent:	<u>12:24</u>	Yeah. Because we have to legal change always. It is the IFRS, so we have the transitie, we have the legal one, but also do the product and process improvements. So, it is a lot of
Respondent:	<u>12:45</u>	So, it's always changing.
Respondent:	<u>12:46</u>	Yeah.
Interviewer:	<u>12:47</u>	And it impacts the way that people work as well.
Respondent:	<u>12:50</u>	Yeah.
Interviewer:	<u>12:50</u>	Including the PMO
Respondent:	<u>12:52</u>	Including PMO. Yeah.
Interviewer:	<u>12:53</u>	All right. All right.

Respondent:	<u>12:54</u>	Because you kept all the tools, the agile working and yeah. PRINCE2 plus. Yeah. The tools are using for project management are different. Also, when you start to Yeah. Agile looks more bottom up, but the strategy is top down. Before in PRINCE2, in waterfall. Everything is, almost everything is top down. And now you have to fit the bottom up working and the strategy top down that you have to fit. That's more difficult because now you have to ask people: you're doing that, but for what strategy points can you say I'm working for the strategy or not?
Interviewer:	<u>13:55</u>	And then can you, would you say then that these two tasks that got less important over time. Not less important. Became less part of the scope over time. Were a solely result of the agile transition or would these other changes have
Respondent:	<u>14:17</u>	It's because You see it in every project. It is not only for this integration project; this is better because there are a lot of people are looking to that for what's happening because the Nederlandse Bank and et cetera. They are looking to, so it has to be to be better in place but to, to specialty for the other changes, projects that it was more yeah. We do it less. Just because people are not knowing it that they have to do it, or they are not responsible. Nobody said you are responsible for that.
Interviewer:	<u>15:06</u>	Okay. I have a quite extensive list here of functions that are usually associated with the PMO. It's based on my literature review for this research. And the way I'm going about this research is that I've defined it four basic roles. There's Of the PMO. There's a very, it's very much complicated to say role, in industry. Cause everyone has their own definition of role. Could be a job description. The role could be a function. A role could be a task. A role could be a shared responsibility over something. And the way I got around this was to associate this with the story. So, in a, in a story you usually have a main character and supporting characters. The main character has a main role and it drives the story from beginning, middle to end. But it does so in the environment created by the supporting characters in their supporting roles that their decisions impact the surroundings of the main character.
Respondent:	<u>16:23</u>	Yeah.
Respondent: Interviewer:	<u>16:23</u> <u>16:23</u>	Yeah. If the story gets complicated enough, you can't really tell who's the main character and who is the supporting character cause they change roles as the story goes on. And the way my analogy goes is that the firm is a very complicated story and it doesn't even make sense in talking of main and supporting roles. Because not even those roles are identifiable. And based on literature research I come with, I come up with four roles for the PMO usually associated with research. And although there's a supporting role, it's not really that supporting role. So, there's a controller call coordinating, there's a coordinating role So, there's a coordinating role related to resource management and management of inter- dependencies between projects and programs. A controlling role, which is related to reporting and measurement. A supporting role, which is related to building the environment in which team thrive, which is training, coaching. And servicing is when the PMO performs very specific tasks that only they have to do, and they do it for different units.
		If the story gets complicated enough, you can't really tell who's the main character and who is the supporting character cause they change roles as the story goes on. And the way my analogy goes is that the firm is a very complicated story and it doesn't even make sense in talking of main and supporting roles. Because not even those roles are identifiable. And based on literature research I come with, I come up with four roles for the PMO usually associated with research. And although there's a supporting role, it's not really that supporting role. So, there's a controller call coordinating, there's a coordinating role So, there's a coordinating role related to resource management and management of inter-dependencies between projects and programs. A controlling role, which is related to reporting and measurement. A supporting role, which is related to building the environment in which team thrive, which is training, coaching. And servicing is when the PMO performs
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Respondent:	<u>19:22</u>	Yeah, but we are not training them. A little bit, if you're using the tools but it's fairly small. Most of the part that we are doing is in the Controlling role.
Respondent:	<u>19:34</u>	And I would like to ask you then to fill in this great table. I've been working this design, and this is so far the best one that I came up with. But this is not perfect yet. I understand that. What I have here is 36 different functions that are usually associated with the PMO. And I have two periods a before the agile transition and after. After means now.
Respondent:	<u>20:02</u>	Okay. Yes. And that'd be for the transition of agile?
Interviewer:	<u>20:07</u>	Yes.
Respondent:	<u>20:08</u>	I don't know it for this company because I came from the acquired company.
Interviewer:	<u>20:12</u>	I know, I know. So, in this case, I would like you only to fill in the after which is the present. And then we go from one, this is not really related to what we do and to find this is a core function of our PMO. If it's really not applicable. There is the NA,
Respondent:	<u>20:31</u>	I miss, the one because when we do everything, I score the five.
Respondent:	<u>20:35</u>	Yes, of course. And then if you could also a score Tell me which role do you perform when you're doing that? Some are very straight forward. So, reporting is probably a controlling role, but there are some others that you could have a mixed interpretation.
Respondent:	<u>20:54</u>	Okay. This is the scale one to five.
Interviewer:	<u>20:58</u>	And this is which role we perform while you're doing that scale. Yes. Yes. If you ever have any questions, you can ask me.
Respondent:	<u>21:13</u>	That's one of the most important terms and that is the controlling role. Monitoring and control of project performance. Yeah, that's difficult because performance if the project, we are not looking for that. That is also concerning.
Respondent:	<u>21:50</u>	In for implementation, we do nothing. And then I think that is more supporting.
Respondent:	<u>21:58</u>	Develop and maintain a project scoreboard. That's for agile. Everybody knows how to do it. So, we are not doing it and it's even not applicable. And then I think
Interviewer:	<u>22:25</u>	If it is not applicable you don't have to put it in a role.
Respondent:	<u>22:27</u>	No, but between you are doing it. I think it is the serving. Or training and you're supporting even. I think when you are doing it, it should be supporting. You develop and implement a standardized methodology That's not We are too big to do that. That's also the discussion. Are you then controlling it that they do with? That's very difficult to do. Promote project management fits in. We promote it but not, not much. Depends how big is project. And then they know when they're not going well, then they do it.
Interviewer:	<u>23:21</u>	But going back to the fifth who decides or who decided if you're going scrum, if you go into SAFe which agile methodology is running?
Respondent:	<u>23:34</u>	I think the product owner and the board they decided. Yeah. And also, the teams can change. It's a, I think sometimes it's very. Because it is depending how, how big is your team and what are you exactly doing.
Interviewer:	<u>23:55</u>	So everyone is free to decide on the best way that they
Respondent:	<u>23:59</u>	Right now it's used SAFe. But you can say that that's too much, that is too little. Then you can put in some other, yeah.

Interviewer:	<u>24:14</u>	Okay.
Respondent:	<u>24:16</u>	So promote We try to do it and then I think this is more supporting. Develop competence, we don't do that. Not our PMO. We don't do that. Just a little bit for using the tools but. Provide No
Respondent:	<u>25:06</u>	Provides a set of tools without an effort to standardize.
Interviewer:	<u>25:08</u>	Yeah, that's right. Yeah. When provide the tools that the team needs but not necessarily is the tools that everyone should use.
Interviewer:	<u>25:19</u>	Okay. Yeah, we do that. We ask them to use our tools, but when they say no. They made it and you put it in. But we try to, to do that. And then you do not
Interviewer:	<u>25:40</u>	I'd be in doubt between supporting or serving as well.
Respondent:	<u>25:43</u>	Yeah. Both, both. Coordinating between the projects, we are not doing it now.
Interviewer:	<u>25:52</u>	But it's the plan to do it in the future.
Respondent:	<u>25:54</u>	But we want to because then yeah, we go more to the coordinating role, because when you see they are doing that. You do that yourself while you're not doing it together. I think That's more coordinating.
Respondent:	<u>26:17</u>	We are not doing that.
Respondent:	<u>26:28</u>	We do one portfolio, the CIO.
Interviewer:	26:34	But managing
	2010 1	2 ar manufingingin
Respondent:	<u>26:38</u>	We do it more for the control now.
Respondent:	<u>26:38</u>	We do it more for the control now. No, we do that. We don't manage programs, resources. Not important for us. That's a lot of discussion always for portfolio management. Do I look to resources? Yes or No? In agile we say it is not necessary anymore because every agile team has 10 men so that's fixed. So,
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Respondent: Respondent: Interviewer: Respondent: Respondent:	26:38 26:47 27:16 27:25 27:54 28:03	 We do it more for the control now. No, we do that. We don't manage programs, resources. Not important for us. That's a lot of discussion always for portfolio management. Do I look to resources? Yes or No? In agile we say it is not necessary anymore because every agile team has 10 men so that's fixed. So, you don't have resource management that anymore. But I do not agree. Why don't you agree? Because have always changes. You have to One team's specialty become They're are sometimes needed by another team. And then you have to say what's more important to have these guys in this team or in that team. Yeah. Are there other people who can replace him? Now product owners maybe know, but it is not centralized. And sending the task that team is performing that needed this guy to the other team. It's not a possibility or I don't know how it is going now. And you can imagine that portfolio management, they oversee all the programs so they can say we need that specialty in that team. And then you have to even look over all the units. You have to look on BUSINESS UNIT 1, BUSINESS UNIT 2 or the CIO. "We need these kinds of people, can we transfer them and then replace? Or they mix that.

Interviewer:	<u>28:54</u>	Provide advice to the upper management. It's coming, it's difficult. Because they're not used to. They are not used to. But in the ACQUIRED COMPANY, I was advising for this program it's not running well or have more that you have to do more that or that. Then I can advise upper management how the programs and projects are running. They are not used to it in this company. So, it should be very It should be supporting the upper management. And then I still think our basic role is the advisory role to management.
Interviewer:	<u>29:45</u>	I'd say it's a supporting role.
Respondent:	<u>29:50</u>	Yeah. Participating in strategic planning. We don't do that now, but I think we should. Benefits management
Respondent:	<u>30:11</u>	We are not working with that. I think when you have the strategy wide, and then you can do the projects, and then you can ask the project what are the benefits. And out of the benefits, how can you fit them into the strategy. Add it to our KPIs et Cetera. And then you don't have any more benefits fitted to the strategy, then you have to stop the project. So far we are not
Interviewer:	<u>30:40</u>	You are not doing it.
Respondent:	<u>30:40</u>	No. Network and provide environment scanning, I don't remember doing that now.
Respondent:	<u>30:56</u>	Monitor and control the performance of the PMO. I don't think so. The project, no In there, the ACQUIRED COMPANY, I thought I did much more. They are not used to it now. We did there also the archiving. And then start the project, he said, okay, you have to do this and that and then you are finished. How do you have to archive your project so that we can find the documents, et cetera.
Interviewer:	<u>31:29</u>	And did they also agile in the ACQUIRED COMPANY?
Respondent:	<u>31:32</u>	Yeah. Very different because it was smaller and the they're used to it. That we ask them, how are you doing it? And they know, yeah, we know. Yeah, we know a lot how to do it. So, they, it was normal to ask this. How can you do that because we know what's the best way in the ACQUIRED COMPANY. And that. Yeah.
Respondent:	<u>32:08</u>	Now we don't do review or product audits.
Interviewer:	<u>32:12</u>	How many teams are they in the ACQUIRED COMPANY?
Respondent:	<u>32:15</u>	Less, but about 40. I think.
Interviewer:	<u>32:19</u>	40 is still a lot.
Respondent:	<u>32:20</u>	Was also a lot, but it was more to And it was smaller, and I worked there for 10 years. So, you know a lot of people, you know, a load of, yeah. You know your environments, you know, the project. So, It's more easy to ask people how things are going in.
Interviewer:	<u>32:44</u>	Which one do you think it's more efficient? This
Respondent:	<u>32:46</u>	Smaller company.
Interviewer:	<u>32:48</u>	With this personal touch or a more distant.
Respondent:	<u>32:54</u>	Personal touch is much better. So, I'm doing this over I'm trying to do it here, but you have to know, you have to learn the people and
Interviewer:	<u>33:05</u>	I imagine that everyone is not always friendly with this approach

Interviewer:	<u>33:07</u>	They are not waiting on you for difficult questions. That's him A lot of difficult questions. I don't want to know it. Now I can say to the screen it is going well. And then he comes to ask some questions. And then I have to say it is orange and it is not. We have a lot of, yeah, we have a few problems. What are we going to do? But that should be better.
Respondent:	<u>33:37</u>	We have no lessons learned. We have implemented and managed a risk database. I think that is, in here that was controlling, but we only did it for the integration for the integration of the other company.
Respondent:	<u>34:08</u>	That was very beautiful risk management because that was very important for the Nederlandse Bank to see we had done good risk management. Every initiative has to make the risks and every units. So, we see. We had a couple hundred risks and it was very beautiful. It was too much, I think.
Interviewer:	<u>35:14</u>	That's a very fancy way to say work life balance. Guaranteeing that people are not working too many over hours. Weekends, not very stressed.
Respondent:	<u>35:31</u>	Get stressed. Developing the change management database, we are not doing that. I think if we should have been supporting that, but That, you see, that all the business units here make their own decisions how to do that. So, then it is very difficult to do everybody in the same way.
Interviewer:	<u>35:56</u>	And to compare it
Respondent:	<u>36:00</u>	Between teams, it is also because when you say it's, yeah. How big are some stories in a sprint and how many boards or story boards? Is so difficult to make that okay.
Interviewer:	<u>36:17</u>	It seems, sorry, five story points in one task and it takes two weeks and that one has the same five and take two days. So, it's very hard to
Respondent:	<u>36:28</u>	To compare. Yes. Just to compare. But that's the thing in a smaller organization better. But now you have more than 10 teams than it's just, I think it will be difficult to make that comparable. Only what you can do is then think to the or plus and the minus that they change from. You do always 60 points and I do 50 or 70 how come. And the other team, so we always do the 10 to bigger and then the do the eight how come, that's the discussion the variation in the team you can discuss that. What's your variation? How big because that's just more compatible with all the teams.
Interviewer:	<u>37:24</u>	But do you think that the teams we think themselves, do they compare with each other? How come you're only working 50 points I'm working 75 every week and
Respondent:	<u>37:36</u>	Yeah, but that's not a discussion but good. The variance That's more of a discussion that you can compare that you do 20% more and the older team 10%more, why? What is happening? And also, that's not to blame the team. But what's happening. Why you cannot deliver or why you can deliver now more. What are the changes to do that?
Interviewer:	<u>38:05</u>	And how does that compare to the value that team brings.
Respondent:	<u>38:08</u>	Yeah. So that's, that's even more important. What all your benefits? No benefits. I did a lot, but it has no benefits.
Interviewer:	<u>38:17</u>	So there is no, and so the value KPIs are not standardized as well. All right.
Respondent:	<u>38:27</u>	That you have to do, but that's very complicated on a very big organization. Because people are going to compare that. And that's not always fair.
Interviewer:	<u>38:40</u>	Yeah. I can imagine that this translates into performance bonus at the end of the year. It gets into people's skin. There's a one more page.
Respondent:	<u>39:03</u>	Perfect. Just one more.
Respondent:	<u>39:09</u>	Portfolio problem solving. We advise a little bit not much. We try to do that. Supporting. Little bits. Benchmarking Managing stakeholders. Not managing
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Interviewer:	<u>39:54</u>	Not, managing. Do you do anything with the stakeholders? Keep them informed?
Respondent:	<u>39:59</u>	We put together a portfolio report and everybody gets it. So, they can read it. And if they do not agree they can always inform. So, we inform them.
Interviewer:	<u>40:12</u>	So not making extra effort to get them involved or consulted with them?
Respondent:	<u>40:18</u>	No, just informing.
Interviewer:	<u>40:19</u>	All right. All right. Perfect. Thank you. Well I have one more then, just to finish. And it's quite broad and quite open. Is there anything I didn't ask you that you'd like to add that is fundamental to understanding the PMO here?
Respondent:	<u>40:38</u>	Well the PMO isn't a function here. So, HR, human resources has a book with all the functions. Project manager et. cetera. PMO doesn't exist. So, I'm project manager and I do portfolio management. It's just not
Interviewer:	<u>41:14</u>	It's not a formal job description, or a formal role. All right. But the structure of the PMO exists only informally then.
Respondent:	<u>41:25</u>	Yep.
Interviewer:	<u>41:25</u>	All right. All right. Interesting. And why is that so? Let me rephrase that. A, why do you think the CIO found the need to have a PMO structure?
Respondent:	<u>41:39</u>	You, you see they need it because they have to reform the boards and they have some need of information about the programs and about availability, reliability, etc. They need the information to publish to them boards and therefore they need PMO to make that. That's what's the first yeah, what they need. But then you get more because when you have all the information. You can advise about that because I see this, I see that. What are the capabilities. They we can come up with the questions. And then it's growing. It's beyond our And growing apart from reporting to more advising as say, you have to pay, you can do this, you can do that with this, with this information. So, you can use it for management only for reporting. But you can also use it for managing.
Respondent:	<u>42:47</u>	And you can then say, we are working with strategy, with the programs. And we have those benefits realized and now you can see that had this KPI that was 4 is now a 6. And that became for this project.
Interviewer:	<u>43:05</u>	So, it shows some improvement.
Respondent:	<u>43:08</u>	Yeah. And that's just the way you are going to, but we are not there. I.
Interviewer:	<u>43:14</u>	t's in constant transition.
Respondent:	<u>43:16</u>	Yeah. Yeah. But, you see, with the agile we thought that a couple of things were not necessary. So, we stopped with that. And now we see after a couple of years, oh we need that. And then you see it is growing again. And then it is there, I think they are going to build a to off. Call them less. Because when you have something, and it is ruining, and everything is okay. Then everybody goes, we can do less. Because money. So, when they're doing less and more and more and more less. Then it's this bit and now we are going to do it again. And this always the cycle That's the cycle of portfolio management of PMO always.
Interviewer:	<u>44:09</u>	Would you say that there is ever a state that the PMO is static, it's working and it's going to be like this and it's just fine.

Respondent:	<u>44:17</u>	Yeah, but it's always in movement.
Interviewer:	<u>44:20</u>	Never static.
Respondent:	<u>44:21</u>	It is bad to then it gets growing to do better. But when you are at your to and it is going well. Then everybody feels they can do less. Then, then it's just you doing less, less, less. Then you miss something and then you build it.
Interviewer:	<u>44:40</u>	Okay. The cycle is, you start improving it until you find a secure place and you
Respondent:	<u>44:48</u>	Then you have a time in the secure place. Yeah, couple of time and then it's going down.
Interviewer:	<u>44:53</u>	Right. So how do I say this? You're accommodating No You get comfortable and you enter in a comfort zone and you start getting
Respondent:	<u>45:25</u>	I think there's natural, I think every company, even in your own, you do the same. But it always goes okay the you do less. Of course. This could be a good enough.
Interviewer:	<u>45:42</u>	Okay, I think I have enough. Already. I would like to thank you for participating in this. I will transcribe it and send it back to you. And you can make sure that I didn't have any misconceptions or didn't miss anything. I'm going to stop recording now.

H.1.2.2. Survey Responses

Group	ID	Function	Period	Value	Role
	1	Report project status to upper management	0: Traditional		
Bug	10 10		1: Agile	4	СТ
troll	2	Monitoring and control of project	0: Traditional		
Monitoring and Controlling Project Performance		performance	1: Agile	3	СТ
and	3	Implement and operate a project information	0: Traditional		
ing a		system	1: Agile	1	SP
uitori ect H	4	Develop and maintain a project scoreboard.	0: Traditional		
Mon Proj			1: Agile	1	SP
	5	Develop and implement a standard	0: Traditional		
men		methodology	1: Agile	NA	
lage ogie	6	Promote project management within the organization	0: Traditional		
Man odol	Man odole		1: Agile	2	SP
letho	Development of Project Management Competencies and Methodologies 6 8 2 0 9	Develop competency of personnel, including	0: Traditional		
Proj		training	1: Agile	NA	
it of es ar		Provide mentoring for project managers	0: Traditional		
men encie			1: Agile	NA	
elop 1pete	9	Provide a set of tools without an effort to	0: Traditional		
Dev Con		standardize.	1: Agile	4	SP, SV
	10	Coordinate between projects	0: Traditional		
geme			1: Agile	NA	
anag	11	Identify, select, and prioritize new projects	0: Traditional		
it M			1: Agile	NA	
Multi-Project Management	12	Manage one or more portfolios	0: Traditional		
ti-P1			1: Agile	3	СТ
Mul	13	Manage one or more programs	0: Traditional		

Group	ID	Function	Period	Value	Role
			1: Agile	NA	
	14	Allocate resources between projects.	0: Traditional	1424	
			1: Agile	NA	
	15	Provide advice to upper management	0: Traditional	INA	
			1: Agile	2	SP
	16	Participate in strategic planning	0: Traditional	2	51
			1: Agile	NA	
	17	Benefits management	0: Traditional	INA	
		, i i i i i i i i i i i i i i i i i i i	1: Agile	NA	
	18	Network and provide environmental	0: Traditional	INA	
		scanning.	1: Agile	NA	
	19	Monitor and control the performance of the	0: Traditional	NA	
		РМО	1: Agile	NIA	
	20	Manage archives of project documentation	0: Traditional	NA	
		8 <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u>	1: Agile	NT A	
	21	Conduct post-project reviews	0: Traditional	NA	
nent	21	Conduct post project reviews	1: Agile		
ager	22	Conduct project audits	0: Traditional	NA	
Aana	22	Conduct project addits	1: Agile		
Strategic Management	23	Implement and manage a database of lessons	0: Traditional	NA	
rateg	23	learned	1: Agile		
Sti	24	Implement and manage a risk database.	0: Traditional	NA	
	24	Implement and manage a risk database.	1: Agile		
	25	Execute Specialized Tasks for Project	0: Traditional	2	CT
	23	Managers	1: Agile		
	26	Manage customer interfaces	0: Traditional	NA	
	20	Manage customer interfaces	1: Agile		
	27	Recruit, Select, Evaluate, and Determine	0: Traditional	NA	
	21	Salaries for Project Managers			
	20		1: Agile 0: Traditional	NA	
	28	Project administrative support			
	20	W7 1 6 1 11 1	1: Agile	NA	
	29	Work-family equilibrium	0: Traditional		
	20		1: Agile	NA	
	30	Developing the change management database	0: Traditional		
	21		1: Agile	NA	
	31	Portfolio problem solving	0: Traditional		
			1: Agile	2	SP
	32	Cost/benefit analysis of projects	0: Traditional		
			1: Agile	NA	
	33	Risk management	0: Traditional		
			1: Agile	1	SP
	34	Project/program delivery management	0: Traditional		
			1: Agile	NA	
ler	35	Project management benchmarking	0: Traditional		
Other			1: Agile	NA	

Group	ID	Function	Period	Value	Role
	36	Managing stakeholders	0: Traditional		
			1: Agile	NA	

H.2 Case B H.2.1. Interview with Consultant 1

Date: 08/08/2019RecordTime: from 12:00 until 13:00 (UTC+01:00)IntervisionLocation: VirtualVirtual

Recording: Skype Broadcast and Android recorder. Interviewer: Henrique Cleto Carneiro

H.2.1.1. Transcripts

Interviewer:	<u>00:03</u>	Perfect. So, RESPONDENT just so it's stated in the recording you're fine with this conversation being recorded from this moment on.
Respondent:	<u>00:42</u>	Yes. I'm happy with that.
Interviewer:	<u>00:43</u>	Yes. Perfect. Perfect. Well, thank you. First of all, for participating in this research. I would like to remind you that you are free to stop answering any moment without even having to give a reason why. This interview is part of my master's thesis research in which I am investigating the changing roles of the PMO with introduction of agile methodologies in large scale. The goal of this interview is to capture your insights based on your experience on this problem. The interview data will be stored into TU Delft's data centres and all of the videos will be removed. And the data will be anonymized.
Respondent:	<u>01:38</u>	Okay.
Interviewer:	<u>01:40</u>	Perfect. And if you have no further questions we could talk.
Respondent:	<u>01:44</u>	Excellent.
Interviewer:	<u>01:46</u>	Fantastic. I will be also recording all my mobile phone. To have a backup in case anything goes wrong. So just for you to be aware of.
Respondent:	<u>01:59</u>	Okay. That's good idea. Anything can happen. Right. That's true.
Interviewer:	<u>02:09</u>	So I'd like to start with some demographic questions on the case itself. Just have them dated on the record. We're talking about an insurance company, is that correct?
Respondent:	<u>02:22</u>	Yes, a large insurance company an US insurance company. They're one of the top four in the u s several thousand employees. But primarily my focus was on the branch in Northern Ireland where they have two and a half thousand employees. So quite a large development organization, software development.
Interviewer:	<u>02:47</u>	Fantastic. And then how many teams would you say that worked with agile methodologies?
Respondent:	<u>02:54</u>	In total there was an 800 people trained in total. So, across teams that was probably close to 100 teams, maybe a little bit more as some of the teams were quite small. And the nuance here is not an I mean I was doing a dual role of training and coaching. So training was maybe one day a week, 20% of my time. So, I would have, I would have trained 800 people, but then my focus was on coaching. So that's the majority of my time is spent coaching at five release trains, agile release trains and five agile programs using the safe methodology. So, of those five programs, there was about a hundred people on average and each, so in

total, my direct involvement then was with about 500 people.

Interviewer:	<u>03:52</u>	Okay. Okay. How long ago would you say that the company decided to move towards agile ways of working?
Respondent:	<u>04:02</u>	Okay. So, I'll work back. So, and let me see. We're in 2019 now. At the end of 2017 I finished up two years, so 2016 and 2017 was when I was primarily working with them and I mean it would have been in the middle of 2015 when they started. They started with their journey. And initially it was a failed pilot, so they spent six months and the coach that they had was very specific in their methodologies and it didn't work well for the pilot teams, so it was deemed a little bit of a failure and that's when myself and Accenture were brought in.
Interviewer:	<u>04:50</u>	Okay. Yeah, I like to move on to some questions that are related to the, the problem itself. The way that this goes is this is an open-ended question on a semi structured interview design. And depending on your answers, I might ask further questions that further elaboration and have a discussion on it. so, to start: can you describe to the best detail that you can remember the task and process that the PMOs performed at the firm?
Respondent:	<u>05:28</u>	Before I started?
Interviewer:	<u>05:30</u>	No. While you were there.
Respondent:	<u>05:33</u>	While I was there? Okay. So, the PMO was a very traditional waterfall PMO when I joined. So, at this the start of 2016 and so very traditionally a bigger focus on governance and project budgeting, they would've been the two big key areas. And there was a realization then that over the space of two years, I started to bring them on a journey through design thinking workshops to put a bigger focus on being value oriented or outcome oriented. So, and part of that was around workshops to establish what their changes in career paths were. But ultimately the bigger focus by the end of the two years was about value realization. That was in simple terms. That's what they were trying to do. By the end of the two years I was with them.
Interviewer:	<u>06:31</u>	Okay. Okay. What in your view then were the responsibilities of the PMO at this agile way of working?
Respondent:	<u>06:42</u>	The responsibilities were to and ensure proper governance? So, add budgetary governance especially, so, and whether it's an insurance company and they have a lot of concerns about risk and compliance. So, governance of the budgets and the PMO worlds are very closely related to at risk and compliance to ensure that compliance certification, compliance testing was being adhered to and that wasn't being overlooked as part of the agile rollout. But then gradually they started to realize that and as part of the PMO, a bigger part of their responsibility was developing the people into these new ways of thinking and new ways of working. So, it was rather than being very business focused, it was more about how are we going to make a better company that's going to be working smarter.
Interviewer:	<u>07:40</u>	Okay. The shift that you perceive then is from governance, coordinating and controlling way of working to more a servicing and supporting way.
Respondent:	<u>07:59</u>	And supporting, yes. So, I suppose like one element of the governance and supporting was also at resource scheduling. So, resource planning. So that was a key element which kept continuing on but became less of a focus as the move towards agile ways of working. So, the PMO and by the time I finished with the organization, they'd moved to the viewpoint of having value streams, well-defined value streams where you would have a hundred people working on the value streams. So, in terms of resource allocation, it wasn't complex. There was a hundred people on the train, on the agile program, they were on the team. So, you didn't really have to battle for resources within the program anymore. So, it was more a case of if someone was finishing up on the program, if you know, their work was perhaps not needed anymore. Still the PMO work was then how can we bring those resources into other trains or other programs. So, it was more of an administrative, but it was much less than it used to be.

Interviewer: <u>09:05</u> Okay, great. And from the, from the past, within the PMO scope that stopped being necessary or stopped being done. Do you recall any of them being picked up by other function? Other roles within the firm.

- 09:25 I suppose one of the elements that was being picked up was around budgetary control, Respondent: budgetary control really had, and they had taken a very strong ownership of it before I was there. So, they were like the, at the budget police really for any projects and teams and programs that we're working at. But increasingly they were looking to move some of those responsibilities onto the scrum master's shoulders as a responsibility. And it wasn't something I completely agreed with because in a true sense the scrum master needed to focus on the efficiency of their scrum team. And so budgetary commitments were something that was distributed out to scrum masters. That would have been the primary thing. And the secondary thing then was capturing metrics. So, performance metrics of teams and individuals and the PMO would have driven an awful lot of the, the tooling, the tooling choices and the tooling administration and, and they would've had provided interfaces for pro projects and teams to input their metrics. But increasingly that was being moved more so into an automated fashion. So that tools like Jira and confluence could capture metrics and data about, you know, story points, velocity and what stories people were walking on, how that equated to then to budgetary elements. And so, they got a little bit clever with it, it was more about automating some of these things that were an unnecessary administration overhead.
- Interviewer: <u>11:15</u> Okay, great. And do you feel that besides automating some of the tasks and distributing it to scrum masters were there any activities that were completely left behind
- Respondent: <u>11:34</u> Sorry I missed that last
- Interviewer: <u>11:38</u> That were completely left behind. Nobody picked up or it wasn't all automated or perhaps being obsolete or any given reason.
- Respondent: <u>11:47</u> Yeah. I suppose the one area that was slightly left behind was the two key areas would be line management and training. So, developing your team members, developing your team members traditionally would be the role of a dedicated HR department. And it was something that wasn't seen as part of the transformation and that you need, you need to provide support to team members as well as scrum masters and product owners as well as stakeholders. So, and that was increasingly an enrolled that I took on and in terms of coaching, training and mentoring. It was a missed opportunity because it's the sort of thing that a client especially should be owning the development of training programs of setting up their ways of working. And so, what was the second one I mentioned there? Oh God, I can't recall what it was at.
- Interviewer: 12:46 Management, you said,

Respondent: <u>12:48</u> Oh, line management. Yes. So then just around things. So, one a scrum master is the person who does day to day management of team members tasks and keeping a focus online management is something that did tend to drop in between the PMO and team members. It was done differently on different agile programs. So, at the risk was on the worst-case scenario that would be one-line manager overseeing maybe 30 or 40 developers are and the head of the test department overseeing anyone who was a QA tester. So, it was done inconsistency across the organization, which isn't necessarily a bad thing because on the in, depending on the context, maybe that's the way you want to go. You want a head of quality assurance, overseeing all of the quality testers and setting out the correct tooling, set the correct automation to correct planning to correct and documentation whatever the QA people needed.

Respondent: <u>13:55</u> But it was something that wasn't done consistently for software engineers and developers especially. So, they were left a little bit to their own devices. And one of the challenges I flagged towards the end was that it was difficult to see who was going to do their performance review at the end of the year. The scrum master was definitely the person that would provide the most input at the scrum master. And then the chief scrum master is what they referred to as the release train engineer in, in SAFe. And, but it's really the scrum master at the program level would have an awareness of team members with a hundred people. It was still a case of are we developing people correctly, are they getting the right

		support? And that was the one concern I have, especially developers. We're getting some good skills, but there was a risk that, you know, someone was not working out well if they were unhappy in role, they weren't getting support or the line management, which was at neutral voice and neutral person and to actually talk to and mentor them and coach them.
Interviewer:	<u>15:02</u>	Okay. Okay. So, quite this line, being more, a little broader than. Both through automation redistribution of tasks or completely letting go of them all in all, which of them do you think is a pain that has been, it's not being done anymore or that it's been done differently?
Respondent:	<u>15:30</u>	Yeah, I would say automation. So, automation is something that they realized there was a lot of manual tasks, a lot of manual administration. And, and in parallel there was a move towards more dev ops approaches and Dev ops tooling so bad build pipelines are automated and procurement of servers running automated tests, test driven development and on automated test suites, all of that was being automated. So wherever possible effort was being put in to improve the, the levels of automation so that people could focus on doing the actual work that brought value. If there were software developer were writing code rather than filling in time reports or, and you know, having to track down some files to fill in a release note if you could, you could have, if you can do that all within Jira and automatically gets pulled out and compiled into an internal release note or external release notes, that's where the real value is. Let individuals focus on getting their work done. And then provide systems and tooling to actually pull the valuable information out.
Interviewer:	<u>16:42</u>	All right. So perhaps I, I sounded wrong. So, this is a positive thing, right?
Respondent:	<u>16:49</u>	Yes, yes.
Interviewer:	<u>16:50</u>	Okay. Okay. I meant to have asked negative aspect.
Respondent:	<u>16:55</u>	Oh. And negative aspect I suppose with the redistribution of tasks, that was one area where roles and responsibilities were defined properly. So, the negative aspect of it is that where individuals weren't being supported and if you didn't have a defined role for who's going to do line management for example. And there was a certain amount of attrition, a certain amount of people leaving the company because they would get skilled up to be working really hard for six months, nine months, 12 months, it feels burned out and they have nobody to talk to. So that was the, one of the downsides to this is that when there's a lot of automation and if you, if you miss out on the social interaction, then people don't feel like they own the work that they're doing, they don't feel involved. And it comes back to the agile manifesto and the first value of individuals and interactions over processes and tools. You can do all that great automation, but if people aren't interacting, they don't feel like it's a social, they don't feel like they're part of a team.
Interviewer:	<u>18:04</u>	Perfect. So, and about the new tasks that the PMO acquired, which ones would you describe as a pain and which ones would you describe as benefit?
Respondent:	<u>18:20</u>	Pain or benefit? Okay. let me see. I suppose that the initial pain was around metrics capturing the correct metrics and it's one of the challenges with all organizations to establish what is valuable, what is a valuable feature or a valuable story or a valuable service or product. So, the pain really is around what metrics are you going to use, which are going to be a good indicator of actual value to your end user or your customer or to the organization. It's one of the challenges which scrum doesn't really define and SAFe has tried. And it was an element that I tried to bring them along on the journey, bringing them towards value realization. But each company would actually take it quite different. It was one of the pains, but as long as they can realize that it is a journey that we might try out and experiment with some of the metrics initially and then some of them was dropped by the wayside and especially things where they're vanity metrics.
Respondent:	<u>19:29</u>	So vanity metrics was the phrase I used an awful lot where and at a traditional PMO would be very concerned about the output of the team, about how productive are the team. And if one team member is working on stories 95% of the time, they would see that as being very good. Whereas with within a scrum team, I would actually prefer the team to be 80% of capacity and leave 20% for random work or innovation or improving their skill sets or extra capacity for live system support. So, it's, it's one of these volunteer metrics which, and the

		traditional PMO, the way the company was, they were very focused on productivity and if someone was 95% working 95% of time, they felt that was really good. If they would drop down to 80% it was almost like they're being punished. They were being pulled in and asked why did only work four days in the week?
Respondent:	<u>20:26</u>	That was a vanity metric. So, it encouraged the wrong behaviours. So that's one of the pains there. If you select the wrong metrics, you will get the wrong behaviours. People will start gaming the metrics and start faking data. Now I don't have examples of that at the company, but it's the concern that I certainly had. So, it's more the pains, but it's also one of the benefits as well that you bring people along and say what's the real value of a new set features. So, if you have two features and the proper metrics should be around, if it's an application for people to apply for insurance doesn't result in conversion or people buying extra insurance or purchasing extra bundles. It's those sort of conversion metrics. Sometimes called pirates metrics. Acquisition. Oh, I can't recall what the other ones were. But conversion is the big one. Really. Are you converting and general public people into customers are, you know, up-selling them on certain things? So that's I suppose in terms of the new tasks, the metrics was a key element where it was painful, but ultimately you get better benefits out of it cause you're focusing in on what the right objectives are the right outcomes.
Interviewer:	<u>21:47</u>	All right. So, at the moment of transition it is a pain, but once you it is stabilized it's an acquired benefit,
Respondent:	<u>21:56</u>	Yes. Because people are all they realize how they're being evaluated in the long-term. They understand how they're going to be evaluated and how their performance is going to be assessed at the end of the year.
Interviewer:	<u>22:10</u>	Yes. And was this at the firm a sole responsibility of the PMO or was it a shared task to define the proper metrics?
Respondent:	<u>22:22</u>	Initially was defined, the initial metrics were defined by the PMO. So, I was originally brought in through the PMO department and to provide assistance and coaching and support in terms of their agile transition. So, they were driving the initial set of metrics. And very quickly with my coaching I was explained to them how the metrics they were looking at, were vanity metrics, were going to result in the wrong behaviours within scrum teams especially. And so, it was a case of bringing them on their journey once they got a baseline set of metrics. And the PMO then worked with each new program that was launched. So, I worked on It was I think six in total agile programs. And as each program was launched, they had the baseline foundation metrics, but then each context would have slightly variations about how they perceived value slightly differently.
Respondent:	<u>23:17</u>	So it was a case of they would have additional metrics that they were concerned with. So, like a customer support system or customer support application doesn't result in conversion rates. It's more about customer support is the reduction in complaints from customers, the reduction in the amount of calls coming into a call centre. And then also things like net promoter score as well if they could be tied back those initiatives. So that's one example where, you know, different sorts of metrics are seen now that there is the concern around lagging metrics that sometimes the metrics are, you know, two or three months behind when a feature or a product or a service was actually built. So that's the challenge. Sometimes you have lagging metrics and you're having to leave visits a piece of work from three months ago on establish that really didn't deliver the value we expected. So, it's not as instantaneous as it could possibly be.
Interviewer:	<u>24:24</u>	That might be a challenge even for different sectors of the economy. Right. So, the, the response of the consumer, will changed drastically between automotive industry and pensions especially.
Respondent:	<u>24:44</u>	So one of the opportunities there is if you can do smaller experiments early on to establish is there a demand for this feature or this request, then you can establish the value early on and make a go no go decision. So, one of the elements of that is doing as small experiments and also then doing ab split testing. Ab Split testing is where you put two versions of a feature live and one version is the new and improved version and you would have specific metrics that you want to measure against the two and only a small percentage of your

improve, you gradually roll out to a larger percentage of the customer base. Yeah, as I'm, I'm familiar with AB testing. Well we mentioned Dev ops and some Interviewer: 25:31 automation effort that happen alongside with agile from what I understood. Were there any other organization transformations in the firm happening at about the same time? Respondent: 25:53 Let me see. One of the big transformations is around outsourcing. So, they have gradually, so in Northern Ireland they had at 2,500 people there I, large majority of them were software engineering and development, software development and, but they were outsourcing a lot of their development work and testing to India and Bangalore. So, one of the challenges there is not historically at 10 15 years ago, a lot of American companies especially viewed outsourcing as a, as a cost saving method. So, outsource the elements of work which don't have any sort of an intellectual property to them that are a little bit generic like can billing customers for example. But increasingly what they were seeing was that the teams in Northern Ireland for doing such a good job that they were doing the new development work, they were doing the, the work that was around intellectual property as well. 26:58 Respondent: And, but the same happened to them when they started to outsource even further far offshore to India. And originally the teams in India were doing a lot of testing. So that's all they were doing, testing applications. And that required in terms of agile delivery testers involved with teams, team members who were in the US in Northern Ireland, which in terms of time zones is a bit of a disaster. It's impossible to have a daily stand-up. So, in terms of logistics, it works against the proper agile practices. The ideal scenario for an agile team. So that's one of the challenges and it's one of the transformations or one of the approaches taken was how can we isolate the teams, how can we and make the remote teams into feature teams that are relatively isolated, that are cross functional do development design build test, and able to deploy their work into a pipeline or into a test harness area where it can be integrated as part of a larger system. Respondent: 28:02 And that was ultimately the goal to have feature teams that could be relatively autonomous rather than have scrum teams going across time zones. And so that's a journey as well because you don't just overnight get a lot of developers in India and all of a sudden, they're able to develop all of these insurance and applications. They don't know the business domain knowledge. So, it's part of the challenge. You still need initially product owners in the US expanding what the business domain is. They might still need a technical lead in Northern Ireland who's been working on some of the technical elements for 15 years. Some of them had been working. It's a gradual step, but you might take, it might take three months, but a really good team in India more often than not, there was maybe six months to actually get them up to speed and then say, okay, we're stepping away. You now have a product owner on site in Bangalore and you're also have a technical lead. And it's a gradual process of stepping away and having a little bit of oversight from say and at the program level, overseeing technical deliveries, overseeing a chief product owner who maybe validates all of the features coming from that team. Interviewer: 29:21 Okay. Makes Sense. It's clear. Apart from this transformation, any other that comes to mind? Some management changes. Structurally, or either people are changing. The board. Respondent: So one of the challenges one of the big challenges was that they had departmental silos, so 29:42 very departmental structures and yet they would have teams and programs that had to work across departmental silos. So, and the challenge there was that you would have directors or senior managers who were responsible to their department and they would have different viewpoints about how their programs would deliver work. So, a big example of the challenge, we had was that in the US there was several dozen teams using XP extreme programming and, and they got extensive training from pivotal, pivotal labs in, I think it was in San Francisco. And they were very much, those departments are very much, it has to be XP focused. Whereas the teams in Northern Ireland are more practical and pragmatic about it. They're more open to scrum and Kanban, especially for live system support. Respondent: 30:54 So one of the challenges was that the leadership at the senior levels, they perceived so in the US the leadership perceived agile and as being pivotal in XP, that was the Bible and anything else was, and not all of the purest version of agile from their viewpoint. Whereas in Northern Ireland, the teams using scrum and Kanban were more adaptive. They

customers or your users are using the new version. You compare the two and if things

		responded to change at a much greater extent. They are more adaptive. If they saw that, you know, at two weeks sprint was too long, did move it to a one-week sprint if they felt that there was life system support, involve at more Kanban principles. And there was pros and cons of both sides. But the difficulty was getting these two methodologies, which both live underneath the agile umbrella to communicate more closely. In terms of the senior management. That was a big challenge because two large elements of the organization were going down different paths in terms of agile and the where we're not responsive to the other path.
Respondent:	<u>32:03</u>	And in parallel to that, it was a gradual transition. It didn't happen overnight while I was there for two years, 2016 and 2017. And I was responsible for training 800 people in total in Northern Ireland. And, but that's 800 people out of 2,500 in Northern Ireland. So that still means there is 17,700 people still using waterfall. So, the challenge there is when you're going through this transition, there's still people using older ways of working. They're still making commitments along some of the larger programs. They made commitments for two years in advance. We're delivering something at the end of 2020 so they would have their project plan and the resourcing plan, and they've got planned out at what they're doing every month for the next 18, 19 months. And then an agile team comes along and says, we're making a change that the billing system, we need you to add, alter your element of the billing system.
Respondent:	<u>33:04</u>	And so it's, it's complimentary and it's not on their plan. So, they're like, well, it's going to have to wait until after 2020. So that's in terms of agile transitions, if you can isolate the work so that it's all in incorporated within an agile program that works best. So, by the end of my two years, I had focused on safe programs using scrum and Kanban teams primarily. And that was usually an agile program of about a hundred people. And over this, over the space two years, that was the purest that got at the end of two years. But there was one or two agile programs throughout at the start of the two years, which had a mix of agile teams and waterfall teams and very quickly it was those pain points of the waterfall team cannot be reactive enough to the agile. The agile teams needs to deliver something in sprint one, sprint two spring three.
Interviewer:	<u>34:04</u>	Okay. I think I have a clear big picture now. I have two more questions for you. And one of them is a different format there's this spreadsheet that I will send to you through email right now. And I'm going to explain what it's all about. Just a second.
Respondent:	<u>35:12</u>	Okay. Take your time. Okay.
Interviewer:	<u>36:18</u>	Perfect. Oh, I just sent you a list of functions that PMOs usually perform and this is based on an extensive literature research. And also, there is a tab with the definition of basic role. I'm going to introduce you to the framework and how I'm describing this problem. Well, I make an analogy with theatre and performing arts that if you have a simple story you usually have a main role, a main character with the principal role and supporting roles around them. The actions of the supportive characters eventually implants is that decisions that the principal has to make. But the story revolves around this principal character, that brings a beginning, middle and end. As the stories get more complex, different characters might have a main role and different characters might have reporting role in different moments in time. And then tracking who is the main character and supporting character becomes a little bit more complicated. Similarly, I make this analogy to a firm. A firm is a very complex story, and so complex that we don't talk about main and supporting characters. But we have different roles that different people we will have while performing different functions towards other people. So, it's about the network and the task that is being carried through. So, what I show you there is a list, a quite extensively list, of 39 functions in sheet number one.
Interviewer:	<u>38:16</u>	All right? Are you following me?
Respondent:	<u>38:17</u>	Yes, I am. Yeah.
Interviewer:	<u>38:19</u>	And for some very interesting reason on sheet number five, even though there are only two. There is a description of the basic role and in this framework the roles of the PMO would be a combination of all of these factors. So, if you could please, fill up sheet number one stating which of these functions more represent best what the PMO does, and in each of 127

these basic roles for both before agile and after agile. And then I would also like a feedback on this afterwards, because the first time I try to do this online remote, this is the best visualization to what I'm trying to do here. But number one would be the least related. And number five would be the most rated. NA is completely not applicable to the context. And then the same we have for the roles .CR is a coordinating role. CT, the controlling role. SP, the supporting role. And RV servicing role. And if you like, take your time to read what each of these rows means sheet five. Let me know whenever you have any doubt on what's on the spreadsheet.

Respondent:	<u>39:52</u>	Okay.
Interviewer:	<u>39:53</u>	Yes.
Respondent:	<u>39:54</u>	Okay. Do you want me to fill them in now or will they fill them in afterwards?
Interviewer:	<u>39:59</u>	Actually now that's up to you, so if you do it now you can take Resolve any questions you're going to have, live with me over here and comment in a way that it will be recorded in, in, in the voice in the audio and transcribed. But you can also for the do it later today.
Respondent:	<u>40:24</u>	Okay. And did you say there was a second question you had or those you had said that I think there was two.
Interviewer:	<u>40:30</u>	The, the second question is a broad question. It is: is there anything that I didn't ask you today that would be fundamental to understand the PMO at the client?
Respondent:	<u>40:43</u>	Okay. So, and I suppose one thing you didn't ask about is the future state of the PMO. So, it's important with any sort of transition or transformation is to understand where the future vision is. And even if it is a, not a vague vision, but an aspirational vision for how they want to improve. So, at part of the discussions I had was around design thinking workshops to establish where they perceived the PMO could go. And one of the design thinking workshops in particular was that most productive. It's where it surfaced a lot of the pain points. So, in any sort of transition people are going to resist some of this change. So, in terms of change management. So, it was a case of People were concerned A big, big problem was that waterfall project managers who had been through the PMI, the Program Management Institute, were concerned that agile was going to make them redundant.
Respondent:	<u>41:51</u>	So they felt they were, they just were concerned that they were going to be out of a job. There was no Scrum masters were not necessarily project managers. And it all comes down, comes down to career. So, one of the elements that was missing was understanding from senior management, the head of the PMO in particular, that they had a clear vision and where they communication is often enough. So, and that's, you know, having that clear vision as understanding what they want to achieve. So, with the company it was about having a more effective development organization that was improving time to market. So, there was sort of the goals or the outcomes that you are looking at, but also then it was elements around value, around making customers happier, delivering better products to customers much quicker than the way they were doing as solutions at the time in waterfall.
Respondent:	<u>42:46</u>	So once that was the discussed and the project managers and agents within the PMO felt a little bit more happy or contented and then the PMO and myself through these design thinking workshops brought them along the journey of how do you perceive this happening, what are your pain points and how can you improve these things. So, coming out of that, and the two big elements that I took away as a coach was that they needed The PMO needed support. So, they needed, everyone needed to be trained about what agile is, what scrum is, what Kanban is. The different flavours. So, they'd understand, how to apply them, when to apply each flavour. And there was two other parts to it. And so, for as a coach, I needed to make sure that the transition lived after I left, that it would grow with any sort of agile transformation.
Respondent:	<u>43:46</u>	It's, it's a journey which will continue on. And so, and first part was setting up a community of practice. So that's trying to foster better discussions to clarify what the vision is to verbalize what the pain points are around specific teams. And then for people that are maybe not starting on the what or on the agile journey just yet, they can just sit in and hear what

		the pain points are. So, that they're aware when they move on an agile team how they can actually improve things. So, community of practice was a big thing, but then also train the trainer. So, within Accenture we're often brought in as subject matter experts and then we leave and all the subject matter expertise leaves with us. So, the key part of the PMO discussion was they needed to have their own trainers, their own cultures, their own SMEs.
Respondent:	<u>44:44</u>	So that involved my coaching and mentoring of agile coaches. Two coaches in particular. But then mentoring senior managers and directors as well so that they could, they themselves, would be coaches for their departments and their teams. And then the other big strand was giving these people specialized training and making them realize that it's there, it's a path of lifelong learning that it's not just you. You don't just go off and do your certified scrum master course and now you're an expert on the scrum. You have to live it and you have to understand what metrics are. And then gradually over time you bring in Kanban or there's elements of Jira which the nuances of Jira which can, can kill off projects all together. But it's case of how that work to your benefit. How does how do you avoid some of the pitfalls?
Respondent:	<u>45:34</u>	So giving people the training as well. So, I suppose that's the one big element is: does the PMO have their vision of what the transition is going to result in? how they want to see a transformed organization? And give extra value to their customers and end users. And the really hard part of it is: if Accenture had been brought in, if they had brought in 20th century people, the only brought in myself in Northern Ireland, just one coach. If they had brought in 20 Accenture people, the temptation for Accenture is always to say this is how you need to do it. Here's your template for how to do this. Here's your implementation roadmap and this is the way it must be done. And that doesn't result in ownership by the people involved. So, the PMO themselves and sometimes have to make a couple of failures themselves. The metrics is an example. You know, they have to make a couple of these failures. And then once they're shown, here's why this metric is a vanity metric and it's a poor indicator for an agile team. They realize and they remember that fact and they learn through doing themselves. So that's a big part of the transition, you know, with, with Accenture, we always need to be positioning ourselves so that we're taking ourselves out of this as quickly as possible and the client takes ownership.
Interviewer:	<u>46:55</u>	Okay. All right. All right. Oh, I think I have all that. I need apart from the table. So, which, how would you like to do the table?
Speaker 9:	<u>47:07</u>	Well, shall we start, I think we've got what, nine minutes left so I can start on the first one and just, you know, I can maybe go through one or two of these and just to make sure that I'm not doing it incorrectly.
Interviewer:	<u>47:23</u>	Perfect. I'm also very flexible, but she didn't have the time. I could stay throughout the whole lists.
Respondent:	<u>47:29</u>	Okay. Well, let's see, how long is the list? It's 39. 39. Okay. And I actually have a call and not, not in eight minutes, but shortly after, which I need to prepare for. So, I'll see how far I get through. And then if it's fine, I can fill them out afterwards.
Respondent:	<u>47:55</u>	Report project status to upper management. So, before the transition that was, that would have been a five as far as I'm concerned afterwards and I would be, it was less of them reporting the status. So am with the, in the early days did the teams were composing powerpoints, which, and the traffic lights of red, amber, green weekly status reports and there was an element of that. So instead of reporting it, it was a case of senior upper management being able to pull the data out of Jira so that the Jira reports were configured. So, there's an element of, and you know the PMO, we're still reporting, they're still evaluating to make sure that the metrics are still there. So it was, I put it as a three afterwards, but a lot of it was automated by tools like Jira. It's all in terms of, and the role that they had so before.
Interviewer:	<u>49:06</u>	No description. I would say that the before is the controlling roles measuring and reporting. And, and the second one as they're only setting up the tool and making sure that the tool works is a supporting role.

Respondent:	<u>49:20</u>	That's supporting. Yes. Correct. Yes. Okay. SP okay. Then monitoring and control of project performance. So that was a big part previously. So, it was a five definitely in terms of that was their governance in effect and monitoring. And afterwards, I'll still put it as a four, maybe because it was more that am project performance was evaluated in a different way rather than team productivity was more about valuable outcomes. So, they were still monitoring. So then in terms of the roles, and it's going to take me a while to get used to these, CR coordinating and controlling.
Interviewer:	<u>50:18</u>	I should put a pop up right there. That always clear which one is each.
Respondent:	<u>50:24</u>	I'm sure once I go through four or five of these, it would be very obvious. So, more controlling. Yeah, yeah, yeah.
Respondent:	<u>50:44</u>	Yeah. I think afterwards it was more of a coordination. I'm perhaps an element of and supporting as well
Interviewer:	<u>50:57</u>	You, if you feel that there's more than one role that could be used to describe it. Feel free to mark both.
Respondent:	<u>51:05</u>	Okay. Okay. I will. And number three, implement and operate a project information system. Okay. So certainly, beforehand and they had a number of different shared documentation system, so SharePoint and, but the moved more towards things like confluence so that the documentation was incrementally being built up. So, implement and operate at previous previously would have been implementing and operating would have been very involved. Certainly, the implementation afterwards, and I'm put it as a three, it's less of less of an involvement because everybody contributes to it and, and then the role more coordinating beforehand and then really supporting them afterwards. Okay. Number four, develop and maintain a project scoreboard. Yes. So, number of all of these are going to be, well maybe a lot of them are going to be fives beforehand, but then maintaining a project scoreboard afterwards. It was much less, it was probably, and I'll put it as two, I'll put in a little comment just to explain that tooling and Jira automated a lot of this afterwards.
Respondent:	<u>52:46</u>	So in terms of the role of beforehand, it would have been more controlling and then afterwards it was more of a supporting role. Okay.
Respondent:	<u>53:03</u>	I now number five develop and implement a standard methodology. So beforehand and yeah, it's very strong. Again, in terms of the PMO, so they did have their own waterfall development methodology. So, it would have been very strong at developing, implement a standard methodology. I would say I'll give it a five afterwards as well because it was standard methodologies around plain vanilla and scrum and Kanban. Then the PMO was overseeing Northern Ireland. Whereas in the US the teams that were overseeing XP teams, they had their own PMO which were able to go in their own direction. So, this is, this is part of the, you know, departmental silos. If you can separate them out, it's fine to have different PMOs doing different things. And how you compare them then is a bit of a challenge. Everybody comes down to outcomes, outcome based. And so, then in terms of role for that standard methodology and it's new, let's say controlling. So beforehand it's coordinating and controlling and afterwards there was a little bit more flexibility. So, there's more about the coordination, less about controlling and more about supporting. So that element I mentioned that starts at about developing your people. It was less about policing metrics and policing the work and more about developing the people in your organization.
Respondent:	<u>54:44</u>	Okay.
Interviewer:	<u>54:45</u>	Which is probably described on levels on the seven, right?
Respondent:	<u>54:50</u>	Yeah. Yes. Okay. So, I might pause at that point if that's okay. I'll fill in the rest of the form afterwards.
Interviewer:	<u>55:00</u>	Perfect. Perfect. Well we'll follow up information that I need to give you is that, well, the videos will be, will be destroyed and the hour they will be transcribed at any point that we, we shared a name of the company or people involved. I will anonymize it in the transcripts

and I'll give the transcripts back to you so you can check if there's any misconceptions on what I wrote. Okay. Perfect.

Respondent:	<u>55:35</u>	Super. I hope, I hope this works out very well for you. I hope you got some good feedback and interesting results.
Interviewer:	<u>55:43</u>	It is. It's so far. It's been quite interesting. It's been a joyful journey. Thank you for debating. I know. Have a great day. I'll be waiting for the spreadsheet.
Respondent:	<u>55:54</u>	Okay. Thank you.

Group	ID	Function	Period	Value	Role
ling	1	Report project status to upper management	0: Traditional	5	CR
ltrol			1: Agile	3	SP
Cor	2	Monitoring and control of project performance	0: Traditional	5	CR
and Controlling ormance			1: Agile	4	CT, SP
ar	3	Implement and operate a project information system	0: Traditional	5	CR
ing Perf			1: Agile	3	SP
Development of Project ManagementMonitoring and Competencies and Methodologies Project Performance	4	Develop and maintain a project scoreboard.	0: Traditional	5	CR
Proj			1: Agile	2	SP
nent	5	Develop and implement a standard methodology	0: Traditional	5	CR, CT
ager es			1: Agile	5	CR, SP
Man logi	6	Promote project management within the organization	0: Traditional	5	СТ
ct]			1: Agile	4	SP, SV
roje Aeth	7	Develop competency of personnel, including	0: Traditional	3	SP
of P nd N		training	1: Agile	5	SV
nt c es a	8	Provide mentoring for project managers	0: Traditional	4	СТ
enci			1: Agile	5	SV
'elof npet	9	Provide a set of tools without an effort to standardize.	0: Traditional	5	CT, SP
Dev Con			1: Agile	5	CR, SP, SV
	10	Coordinate between projects	0: Traditional	4	CR
			1: Agile	3	CR
11	11	Identify, select, and prioritize new projects	0: Traditional	4	CR
ent			1: Agile	3	SP, SV
gem	12	Manage one or more portfolios	0: Traditional	2	СТ
lana			1: Agile	2	СТ
ct M	13	Manage one or more programs	0: Traditional	4	CR, CT
roje			1: Agile	4	CR, SV
lti-P	14	Allocate resources between projects.	0: Traditional	5	СТ
Mu			1: Agile	3	CR
ant	15	Provide advice to upper management	0: Traditional	5	SP, SV
jeme			1: Agile	5	SP, SV
Strategic Management Multi-Project Management	16	Participate in strategic planning	0: Traditional	5	SP
c Mi			1: Agile	5	SP, SV
Itegi	17	Benefits management	0: Traditional	3	SP
Stra			1: Agile	3	SP

Group	ID	Function	Period	Value	Role
	18	Network and provide environmental scanning.	0: Traditional	4	CR
			1: Agile	3	CR
	19	Monitor and control the performance of the PMO	0: Traditional	5	CT, SP
			1: Agile	5	CT, SP
	20	Manage archives of project documentation	0: Traditional	3	CR, CT
			1: Agile	2	CR
	21	Conduct post-project reviews	0: Traditional	4	СТ
			1: Agile	4	CR, SP
	22	Conduct project audits	0: Traditional	5	СТ
			1: Agile	4	SP, SV
	23	Implement and manage a database of lessons learned	0: Traditional	3	СТ
			1: Agile	3	SP
	24	Implement and manage a risk database.	0: Traditional	5	СТ
			1: Agile	4	SP
	25	Execute Specialized Tasks for Project Managers	0: Traditional	3	SP
			1: Agile	2	SP
	26	Manage customer interfaces	0: Traditional	1	
			1: Agile	2	
	27	Recruit, Select, Evaluate, and Determine Salaries for	0: Traditional	4	СТ
		Project Managers	1: Agile	4	СТ
	28	Project administrative support	0: Traditional	5	СТ
			1: Agile	4	CT, SP
	29	Work-family equilibrium	0: Traditional	NA	
			1: Agile	NA	
	30	Developing the change management database	0: Traditional	4	СТ
			1: Agile	NA	
	31	Portfolio problem solving	0: Traditional	3	CR
			1: Agile	3	CR
	32	Cost/benefit analysis of projects	0: Traditional	5	СТ
			1: Agile	5	CR
	33	Risk management	0: Traditional	5	СТ
			1: Agile	4	SP
	34	Project/program delivery management	0: Traditional	5	СТ
			1: Agile	3	SP, SV
	35	Project management benchmarking	0: Traditional	5	СТ
			1: Agile	5	СТ
er	36	Managing stakeholders	0: Traditional	3	СТ
Other			1: Agile	2	SP

H.2.2. Interview with Consultant 2

Date: 14/08/2019 Time: from 16:30 until 18:00 (UTC+01:00) Location: Virtual. Recording: Skype Broadcast and Android recorder. Interviewer: Henrique Cleto Carneiro

H.2.2.1. Transcripts

Interviewer:	<u>00:00</u>	Okay. Now we're being recorded. I would like to start with a few demographic questions. I like to call them this. How many employees roughly does the company have?
Respondent:	<u>00:15</u>	Well, I believe at the time I was there, they had a few thousand it staff. I don't know the numbers more broadly in the insurance side of the business because my primary focus was on their IT department.
Interviewer:	<u>00:30</u>	Perfect. Perfect. And how many teams were working with agile methodology like that?
Respondent:	<u>00:37</u>	At the time I left they had more than 100 teams in some combination of scrum or the pivotal extreme programming model or scaled agile framework.
Interviewer:	<u>00:55</u>	Right. So, scrum pivotal extreme programming and SAFe?
Respondent:	<u>01:02</u>	Correct.
Interviewer:	<u>01:03</u>	Yes. All right. How would you describe your personal part in the project in the company back then?
Respondent:	<u>01:10</u>	So I was there for three and a half years and as kind of the agile transformation lead. I was brought in initially to help the PMO office sort of define and sketch out their agile governance procedures. So, all of the, you know, audit standards, procedures and kind of the transition away from their very heavy document-based waterfall stage-gating process into more lightweight, approachable, agile governance framework that could still satisfy their audit. They're obviously in the financial services industry. So, they were very concerned about COBIT controls and Sarbanes Oxley, separation of duties and all of that. And the PMO essentially was within this company, the driver of those sorts of standards. So, they felt that Very important That whatever we put in place with from an agility perspective could solve and satisfied those same auditors' concern.
Interviewer:	<u>02:07</u>	Perfect. Perfect. Those are the best you can describe by memory right now. What would you just stay where the main functions and processes and thought of the PMO by the end of your day at the accomplished?
Respondent:	<u>02:24</u>	So it was interesting because when we started the, the PMO basically served as a check against IT delivery to make sure that the business was getting what they wanted. So, this was at the beginning, their past identity was one of maintaining relationships between business and IT executives. And then the standard triple constraint management, right on scope, on schedule, on budget in service of the business. What was interesting about that dynamic was the PMO was actually part of the IT department of the director of the PMO reported into the CIO's as one of his direct reports. So that was interesting that essentially it became almost like a mediator between business and IT when they started on their agile journey then and where they landed when we left was, they were starting to become more partners in value creation. So, they became the PMO office itself tried to lead by example.
Respondent:	<u>03:24</u>	So restructuring themselves according to kind of scaled agile principles tried to have an agile first mindset within the work that they did. So, then it would've been be then easier to convince their other business and IT stakeholders to get on board. And really just starting to shift from making sure the business got the scope they asked for to helping the business, make sure they were getting the value that they asked for. So, they invested heavily in scrum master training and product mindset training for all of their former project managers. They formed their own at our direction agile community of practice. An agile coaching office where we kind of hand selected and hand trained their initial coaches and then they hired some in from outside. And my understanding is that that group is still up and running and flourishing. By the time we left, the key, one of the key metrics they were looking at was kind of their overall agile footprint within their portfolio.

Respondent:	<u>04:20</u>	When we first started in kind of years zero agile constituted like somewhere around 10% of their overall project portfolio from a tagging perspective. And by the time we left three and a half years later, they were upwards of 60% of their overall portfolio was leveraging one if not several of the scrum extreme programming or scaled agile framework methodologies that we put in place there. And then maybe even higher now cause another year or two has gone by. So
Interviewer:	<u>04:50</u>	Would you say that in this process different positions in the company took up activities that the PMO used to perform?
Respondent:	<u>05:04</u>	Some did. So, this company also while we were there and made several acquisitions and had kind of several, we call it a new business model kind of pilots happening, I'd say that those areas were more forward thinking and were already in a position where their structures more easily aligned to the work that the PMO was doing. So, they were sort of, they were sort of the early adopters of more of a formal partnership with PMO and technology and kind of all getting on the same team. And the first areas where you saw the, I'll call it lines of demarcation between it versus PMO versus business started to blur. But those were really virtual constructs at the beginning. They each still had still formal reporting structures in each of those towers. But definitely got more collaborative in some of those spaces. There were other spaces, particularly within the company's legacy IT portfolio.
Respondent:	<u>06:02</u>	So all of their mainframe some of their, you know, 10, 20-year-old systems, those were the hardest ones to move because it was such a niche skillset in these antiquated systems. Of knowing how they worked and how to code in them that they were very averse to any sort of change. And so those were the areas where the struggle was the hardest. But the PMO had an advantage here that I haven't seen in other companies where because they were sort of the first mover on the transformation journey, I think their value proposition stayed valuable longer than others where say the business, or it could have just sort of taken their jobs and their responsibilities away from them. But one thing that was interesting and one hurdle that they still had to solve after I left was the PMO that I supported was within the broader IT umbrella.
Respondent:	<u>06:54</u>	The business organization also had their own kind of business PMO. And that was always an interesting dynamic, particularly around large or high-profile programs. [It] Was which PMO was really the one trying to either take the reins from a legacy map mindset or trying to push the change from a transformational mindset. So that was an interesting dynamic. That was the first time I've really experienced that. But since then I've seen that model at a lot of other companies where you have such a firm entrenchment of it and business departments as separate entities.
Interviewer:	<u>07:30</u>	Could that be the result of the acquisitions they had?
Respondent:	<u>07:34</u>	I think it was more a result of corporate DNA. Their acquisitions In each acquisition they were pretty good at folding into the IT side. Where each acquisition, basically got a new divisional IT group spun up to help them consisting up some combination of the acquisitions' old headcount and leadership as well as then senior leadership from the broader company to help direct the integration.
Interviewer:	<u>08:05</u>	When I said that if any task or processes were picked up by other people in the organization is not in the sense of losing value. But only redistribution of tasks.
Respondent:	<u>08:20</u>	So in terms of redistribution of tasks yes, I'd say that they did encourage the business side to take up more ownership in kind of budget accounting and forecasting. They did encourage the technical leadership to take more ownership properly in the software quality that they were creating. And where the PMO sort of retained their responsibility was in really kind of audit, compliance, and I'll call it just kind of the behind the scenes back office orchestration of, you know, the, the tagging of the projects, the assignment of scrum masters, the vetting of which methodology would be most appropriate. Those are the sort of things that they kind of retained for themselves.

Interviewer:	<u>09:09</u>	Perhaps you can assess that Among the tasks that got redistributed or responsibilities that got repurposed, which would you say went better this way and which would you say went worse?
Respondent:	<u>09:36</u>	I think the redistributions that worked the best. We're the business involvement and understanding value creation and the PMO being a sponsor of driving what they ended up calling KPI workshops or essentially helping make sure that the goal of any particular project initiative or team was not just deliver x, this thing, this piece of scope, but was achieved this business goal, right. Improve, you know, revenue by x user experience by y you know, lower cost by z. Some actual tangible result. The stuff that I think was harder to transition, essentially the PMO still became the, the checkers, right? The people that were still held accountable and making sure stuff was getting done. Reporting status, they weren't able to give that up the way that they wanted to. And again, I think some of that was just perception of within IT and business leadership of well, PMO, that's your job, therefore you should keep doing it.
Respondent:	<u>10:45</u>	And another thing that I think was difficult was trying to get, I'll call it pressure off of the budgeting. They still hadn't been able to shift to a more team or cost of delay or long live investment vehicle type budgeting. It was still kind of yearly, here's our list of priority projects and then therefore here are the teams and people that are going to work on them. And that wasn't a unique fault of the PML. I think that's just passing the collection plate around for shared services. The, the business initiatives that had the biggest funding always ended up taking the best talent. That's problem that I see uniformly across the agile clients that I coach is very few clients have been able to make the jump into treating technology the same way that they do say sales or marketing, which is a function that is part of doing the business versus IT historically being well these are just the people that manage systems for us. And there's a big difference between technology in service of business versus the kind of in house, you know, email systems, chat systems, work tracking systems, et cetera. But they were lumping all of that under their IT and therefore the PMO was put in the middle of trying to succeed on both fronts, some of which were top line goals from a business perspective, others which were bottom line goals from an internal perspective. So that conflict in goals I think puts them in a tough spot sometimes.
Interviewer:	<u>12:26</u>	Okay. And talking about additional scope that the PMO got with this agile transition. Is there anything that you can recall that they absolutely didn't do before and they started doing it because of the agile transformation and after?
Respondent:	<u>12:46</u>	Yeah, they, they had to get more involved in domains which were traditionally not part of their wheelhouse. These included change management. So, while there were several change management groups within the company to PMO, basically as the shepherds of the agile transformation needed to become sort of then the champions for agile change management they had to get involved in much more frequent and updated delivery of agile training. Training was a function within IT that they had a small team within the PMO owning. But once, if you can imagine trying to go from say, roughly 10 agile teams to a hundred, the frequency, the quality of the materials and the number of instructors needed completely changed. And so, they relied on us as external vendors to provide with that. We built all of their different academies and then they had to own it moving forward with a very, very high demand.
Respondent:	<u>13:43</u>	So, and in addition to that, other things that they had to start doing were essentially they had already owned kind of the enterprise application lifecycle management and tooling. So they had Microsoft project but they made a big push into, at the time I was there, the Atlassian tech stack, the pivotal labs I think it's called pivotal tracker, so they had to get much more conversant in, I'll call it a delivery tooling as opposed to just project management tooling and the integration say between, you know, your agile, you know, tool that lets you make a backlog in a team board and the source control management system or that same agile tool and the continuous delivery pipeline infrastructure. Because a number of the changes they made to satisfy audits were to help auditors get that information directly from IT systems instead of documents that sat in the SharePoint. So, they had to get very much more conversant in enterprise delivery tooling end to end, not just the project management part of it.

Interviewer:	<u>14:44</u>	Okay. And you mentioned the auditors. Would you say that this was particularly enterprise delivering tooling particularly related to the agile transformation or the new demands of the auditors and regulators?
Respondent:	<u>15:06</u>	There wasn't really a lot of new demand from auditors and regulators. Most financial services companies, this company included, are well aware of the regulations that they have to adhere to. I think what was a challenge for this company was that strong audit practice now being exposed to a completely different way of working but expecting to see the same old stuff that they got before. So, what this company did was actually invite their auditors into the definition of their new processes and to basically show them to go back to formula and not What we had to teach them was the role of an auditor is to look for evidence of certain controls or activities, not to look for a specific template or document to be found in this specific location. That's basically a shortcut. So, what we had to do with them with the PMO was to teach both their internal compliance department and then vis-a-vis through them then their external auditors, what other different types of evidence are satisfactory.
Respondent:	<u>16:08</u>	As well as the old documentation. So, to show them, hey, these agile tools that you now have, they have a complete work history log of every single person who's touching it. Hey, instead of looking for this TP101 test plan that's this stored in this folder on a SharePoint, you can now on every single work item in Jira find a sub task which is associated to the definition of the test cases and then a link to where those are stored. So, it's actually a finer grain level of control as well as just kind of going back to formula on things like separation of duty. What is it for and is it really meaning that you have to have either two vendors or two different departments doing it or just the same individual person cannot both code peer review and deploy their own code?
Respondent:	<u>16:57</u>	As long as there's one other human being involved, somewhere on that process, you theoretically have separation of duty. Is it okay to have an automation test harness or an automated security testing framework be a stand in for a human set of eyes? So just conversations and dialogues like that with auditors to show them your job has now gotten a little bit more complicated because since there are multiple methodologies, you have to be familiar with looking for different types of evidence. But just like in a courtroom, for example, whether it's testimony, whether it's documentation, whether it's just someone's job. And that was actually a big a big grouping of things was, we basically said one of the major controls that they struggle with was, well, where's our proof that the business signs off on these requirements? And we said, well, each agile team at this company gets a named business product owner who reports into the business. The very fact that their role says that that's their job and the very fact that they are the ones marketing things done should constitute acceptable evidence of business sign off. So, we had a lot of training and education for them of certain controls are achieved based on the institution of certain agile roles. So that was another, a fruitful path of dialogue you had with them.
Interviewer:	<u>18:11</u>	That's very interesting. They seem quite open to the change.
Respondent:	<u>18:16</u>	They came around it probably took the full three years. We were there to get them fully there. Their first couple audits of agile teams, internal audits, right. Run by their compliance department. I never got any insight into any external audits that were done, but they were very contentious. And again, because it was a mix of, despite being educated in all those different things, most of the dings that ended up hitting teams were, well we can't find evidence of x or y or Z. Which the people that were involved in coaching those teams with the scrum masters knew that documentation existed. And so, it was just a lot of manual work to then go back to the others and show them, you looked over here, this stuff was over here. Right. So, they learned a lot, actually, about better documentation procedures within their offshore teams.
Respondent:	<u>19:05</u>	They learned a lot about making sure, for example, a lot of teams didn't have test cases because they were doing test driven development and their test cases were literally in the code. So, they had been a whole to do item following that audit to make sure that the auditors had some way to actually see proof of unit tests, for example, the code coverage metrics through status code analysis or other ways. Which was interesting because then instead of just the PMO, the IT department more broadly, and the business department had to jointly sort of help respond to those audit findings, which would be to be expected if the

		whole point of agile transformation is to start to bring those Venn diagrams of business, PMO and IT closer and closer together into one uniform circle.
Interviewer:	<u>19:47</u>	Makes sense. Well in the scope of these new tasks, new acquired tasks and in the same way of my last Previous question which one would work best, and which one would say didn't work that well?
Respondent:	<u>20:08</u>	Of the new things that the PMO took over, think they were most enthusiastic about the agile tooling. So, they actually named a product owner. They did, you know, vendor research, they brought vendors in, got some partnerships with that. The, the hardest part I think was getting trust from the business to trust their judgment on what metrics they should be measuring. Right. So, did you know, imagine a hypothetical where I'm a business owner and I understand my business and know what I'm trying to achieve. And now here comes somebody that a year ago was just a project manager that I got to tell what to do. Now trying to tell me that I have my KPIs defined well enough. Again, I don't think this was a fault of the PMO. I just think it was a cultural divide. You know, you stay in your lane and I'll handle my stuff.
Respondent:	<u>20:57</u>	But the hardest thing was to actually be viewed as experts in best IT practice, right? Because they're trying to teach agile teams how to code better. And they're also trying to teach business how to be more effective in, you know, KPI measurement, which is historically not something they've done and therefore had from the perspective of those two sides, only a little bit of experience in. Right. so that was their big hurdle was they knew that that's what their job had to be, but they weren't perceived as having enough depth of experience in doing it.
Interviewer:	<u>21:30</u>	Well taken care of our time. I have one activity and another question.
Respondent:	<u>21:42</u>	Yeah, that's fine.
Interviewer:	<u>21:43</u>	Yes. this activity is rather long, but I don't think it's going to fit here.
Interviewer: Respondent:	<u>21:43</u> <u>21:49</u>	Yes. this activity is rather long, but I don't think it's going to fit here. I don't have a hard stop. So, if you're I don't have another meeting until 1130, I think. So
Respondent:	<u>21:49</u>	I don't have a hard stop. So, if you're I don't have another meeting until 1130, I think. So Okay. It's morning there. Right. I know, but I what I mean is I'm talking about it now. I'll explain the activity. So last time we talked, I told you about the four basic roles that I devised for this research after extensive literature search. And these are the coordination role, the controlling role, the service role and the supporting role. Coordinating is resource management, allocating people and budget. The controlling is measuring, reporting basically. This supporting is about training, coaching, mentoring and getting the team in the environment they need to perform. And the servicing role is providing specialized service for different units, for different people either with the organization and outside. And I have a list, quite an extensive list of the most documented function that the PMO have. I would like, I will send it to you right now thought email. Cause I tried earlier today showing like this, but it is hard to read. And I would like you to rank between one this the activity or this question has nothing to do or has very little to do with the PMO that we have. A five it is
Respondent: Interviewer:	<u>21:49</u> 21:55	I don't have a hard stop. So, if you're I don't have another meeting until 1130, I think. So Okay. It's morning there. Right. I know, but I what I mean is I'm talking about it now. I'll explain the activity. So last time we talked, I told you about the four basic roles that I devised for this research after extensive literature search. And these are the coordination role, the controlling role, the service role and the supporting role. Coordinating is resource management, allocating people and budget. The controlling is measuring, reporting basically. This supporting is about training, coaching, mentoring and getting the team in the environment they need to perform. And the servicing role is providing specialized service for different units, for different people either with the organization and outside. And I have a list, quite an extensive list of the most documented function that the PMO have. I would like, I will send it to you right now thought email. Cause I tried earlier today showing like this, but it is hard to read. And I would like you to rank between one this the activity or this question has nothing to do or has very little to do with the PMO that we have. A five it is quite related, quite linked to what we do.
Respondent: Interviewer: Respondent:	<u>21:49</u> <u>21:55</u> <u>23:37</u>	I don't have a hard stop. So, if you're I don't have another meeting until 1130, I think. So Okay. It's morning there. Right. I know, but I what I mean is I'm talking about it now. I'll explain the activity. So last time we talked, I told you about the four basic roles that I devised for this research after extensive literature search. And these are the coordination role, the controlling role, the service role and the supporting role. Coordinating is resource management, allocating people and budget. The controlling is measuring, reporting basically. This supporting is about training, coaching, mentoring and getting the team in the environment they need to perform. And the servicing role is providing specialized service for different units, for different people either with the organization and outside. And I have a list, quite an extensive list of the most documented function that the PMO have. I would like, I will send it to you right now thought email. Cause I tried earlier today showing like this, but it is hard to read. And I would like you to rank between one this the activity or this question has nothing to do or has very little to do with the PMO that we have. A five it is quite related, quite linked to what we do. In this particular case or just generally given my experience.
Respondent: Interviewer: Respondent: Interviewer:	21:49 21:55 23:37 23:40	I don't have a hard stop. So, if you're I don't have another meeting until 1130, I think. So Okay. It's morning there. Right. I know, but I what I mean is I'm talking about it now. I'll explain the activity. So last time we talked, I told you about the four basic roles that I devised for this research after extensive literature search. And these are the coordination role, the controlling role, the service role and the supporting role. Coordinating is resource management, allocating people and budget. The controlling is measuring, reporting basically. This supporting is about training, coaching, mentoring and getting the team in the environment they need to perform. And the servicing role is providing specialized service for different units, for different people either with the organization and outside. And I have a list, quite an extensive list of the most documented function that the PMO have. I would like, I will send it to you right now thought email. Cause I tried earlier today showing like this, but it is hard to read. And I would like you to rank between one this the activity or this question has nothing to do or has very little to do with the PMO that we have. A five it is quite related, quite linked to what we do. In this particular case or just generally given my experience. Okay. Yes. So, I'm to read that list. Score them one to five in terms of for that specific PMO,

speaker 1:	<u>23:58</u>	So that is before and after. As well as marking in which of these roles that this participation happened. Let's see. Yes. Reporting project management might be a five in the before scenario under a controlling role.
Respondent:	<u>24:17</u>	Okay. Yeah. So, you're saying I can do that offline then?
Interviewer:	<u>24:19</u>	Yes, exactly. If you like to do it online, I would be here to answer any questions that you might have on this.
Respondent:	<u>24:27</u>	Okay, fine. Well let's do this thing. Let's so go ahead and send that over. And we can get to your other questions and then once that's done, whatever time we have left, I'll start going through it.
Interviewer:	<u>24:42</u>	Okay I'll send it to you right now. All right, well the last question is a very broad question. Is there anything I didn't ask you that you feel is fundamental to understanding the PMO in this case? And these changes they have gone through?
Respondent:	<u>25:27</u>	To me. The important question from a PMO is fundamentally in an age without projects. What is the role of a project management organization? I think that was the primary impetus for this particular PMO was the identity crisis really that was triggered by the desire within IT to make this shift to agility. I think there are certain PMOs which try to tackle that head on, which will therefore rebrand themselves as a value management organization or to try to kind of become the standard barriers or standard bearers rather for product management. I think that really is the fundamental question. If you go back to the early days of agility back in the late nineties, early two thousand, when the manifesto and the scrum guide and all of that came to being project was not a bad word. In fact, you know, initial early texts like Mike Cohn's agile estimation and planning texts, which actually I think is a really good foundational place for any PMO executive to start.
Respondent:	<u>26:41</u>	It was written in 2006. It's Oldie but a goodie. He actually says the word agile projects throughout. I think what got lost over time was the notion that you can still do projects, but you have to have permanent teams. So, the idea is instead of the traditional, bring a bunch of individual people together to deliver a project and then blow it up, you have collections across functional people that always stay together, that can move from project to project to project. As the design thinking world and product world and lean start-up world kind of got merged into the agile thought space more and more it became a shift away from projects in general and into just continuous investment in products which if you Google what is a product, you can find a number of different answers. So, I think part of the big shift that a PMO will need to make it's a number one decide is project going to continue to be our primary unit of delivery or not?
Respondent:	<u>27:50</u>	And the answer to that question will then steer the vision for what their agile transformation journey looks like. Because if you retain the notion of project, then you should jump immediately more into team constitution and changing funding models and things like that. But if you're then going to shift instead into, well no, we want to get more into product management or value management or any number of those other things, then you're now talking about transforming ourselves out of a job. Right? Because now you're talking about all those four roles, control, coordination and I'm forgetting the other two that you mentioned. Shift your organization more toward value or product. You're really trying to then get those four roles embedded into teams and business and IT directly, which that's a very different end state depending on the desire. So that's something that that I think is a fundamental question that PMOs should be asking themselves, which is what does the P in PMO stands for and do we think that that is something that should or should not continue?
Interviewer:	<u>29:00</u>	Okay. All you don't weigh both well jargons are both a blessing and a course.
Respondent:	<u>29:09</u>	Yes. I, I'm quite frankly shocked at how often the biggest sticking points and transformation journeys are just vocabulary. Yes. The project mean what does program mean? What does portfolio mean? What does product mean? What does, you know? It's funny that they all seem to have a p in them. But just the language and common adoption of a language is super important. Because I've had people have vicious arguments when they've been talking

		about the same concept because they want to use two different words for it. So that's, it's always fascinating to me.
Interviewer:	<u>29:45</u>	And no one will give in.
Respondent:	<u>29:54</u>	Okay. Going back to my previous comment, it's more, yeah, it's a cop out. For example, if you're trying to answer that, what is the p and PMO stand for and say we will just make it programs or portfolios because the fundamental of wrapper of an initiative versus is it a wrapper of a long lived, continuous invested asset for the business or for IT. But that divide still exists. Whether you use the word project, portfolio or program, it just pumps the question a little deeper into, well, what then do programs and portfolios contain? Do they contain sets of smaller initiatives or do they contain sets of individual assets like a particular system, a particular line of business, etc.
Interviewer:	<u>30:40</u>	Perfect. Perfect. Well I think I'm good with the information that I got. We can proceed to the document.
Respondent:	<u>30:51</u>	All right, I've got your functions list. I'm going to go back to school and read the instructions carefully before I begin. Okay. Opening it down.
Interviewer:	<u>31:15</u>	You've mentioned I'm going back to school. I thought a lot of people actually painting the whole ball in the form, taking their time. It was quite interesting.
Respondent:	<u>31:27</u>	Okay. Hopefully just because they want to do a good job for you.
Interviewer:	<u>31:31</u>	Yes. That's, I appreciate, I appreciate the time that the put in it.
Respondent:	<u>31:40</u>	Forgive me leaning close to the screen with my bad eyes. Okay. Report Okay. And it's one is low involvement, five. Four is
Interviewer:	<u>31:51</u>	Five is high involvement. And NA is not applicable. Really does not relate at all to what they do.
Respondent:	<u>32:03</u>	Yeah. Okay.
Respondent:	<u>32:45</u>	The themes here are similar cause they, he's still owned but they got more collaborative help in and in a lot of these things.
Interviewer:	<u>32:55</u>	All right. Good to know. Which one are you talking specifically? The first five.
Respondent:	<u>33:01</u>	I'm looking now at reporting project status, monitoring and controlling of project performance, implementing and operating object information systems. They're a five on the before, but I'm marking them as a four in the after because when push came to shove, they were the ones that had to do the work, but they've gotten more help and support from IT and business stakeholders in the contents of those things than they used to. So, it wasn't anymore the single project manager running around getting everything from everybody. That person still made sure it happened, but got more people involved in it. So then for, for developing and implementing a standard methodology, I'm leaving that as a five in a before and a five in an after. Actually no, I'm going to change my mind because I really think before they did it, there wasn't a standard and that's why that triggered it.
Respondent:	<u>33:54</u>	So I'm going to put them a three and then a five after. And then they were the standard bearers or promoting project management within the organization. Big on projects. They then actually, interestingly, their director left and once that director left, there was a lot less impetus on project status and more on product and development. So, I'm going to go from a five to a three there and then once I finished the numbers, I'm going to go back and do the roles. Right. competency of personnel. I'd say that was a two and then a four, truthfully. What specifically with respect to agile I think mentoring for project managers, you're pretty strong on that before and probably the same after, maybe more so because they got a little bit more I'm looking for They embraced more of the coaching mindset as opposed to

you know, rigid performance hierarchy kind of thing. Provide a set of tools without an effort to standardize. What does that mean?

- Interviewer: <u>35:11</u> Well there are different tasks here that talk about standardization processes and you might need some tools to do so. Like Jira. Well we've mentioned a few. This would be just providing the tools that they need software tools to work.
- Respondent: <u>35:32</u> Okay. I'm still having a hard time reading it cause they, they wanted to standardize it. So, I'm having a hard time knowing how to score that in terms of providing a set of tools without an effort to standardize maybe it's low then in both because they were trying to standardize.
- Interviewer: <u>35:56</u> Okay. Yes, I would say that.
- Respondent: <u>35:59</u> Okay. That helps me. It's lines 19 and 20. Question number nine.
- Speaker 3: <u>36:08</u> I know I'm following you here. I'm looking now for the one that talks about standardization.
- Respondent: <u>36:22</u> So for identifying, selecting and prioritizing new projects, they used to have no control over that at all. It was just they were given what they were given, but through the methodology betting in a number of other things as they got more involved. So, I'd say they went from a one to a three there. Portfolio management. Yes. Strong in both. One or more programs. So, for questions for alliance 25, 26, 27, 28 is that with respect to their expectations of an individual or is it says managed one or more portfolios and manage one or more programs? What's the heart of those two?
- Interviewer: <u>37:08</u> Well it's basically where the P stands.
- Respondent: <u>37:17</u> So I'll, I'll just, I'll call them high because they had hundreds of there.
- Interviewer: <u>37:22</u> Were they managing portfolios or... Did they call them portfolios or program?
- Respondent: <u>37:30</u> They did both actually. So, they had all three. Allocating resources between projects? They only controlled PMO resources.
- Interviewer: <u>37:43</u> So, internally?
- Respondent: <u>37:48</u> Yes. But when they were waterfall, I think they did coordinate getting percentages of people say that that maybe went up. We're down a little bit because not that they are teams, they don't spend as much time doing it. Providing advice to upper management. How upper is upper in this question? Okay.
- Speaker 3: <u>38:22</u> I would say C-suit, but it is flexible on the research this is based on.
- Respondent: <u>38:29</u> I'm going to call them high in that because they, that, I mean that's still. Has it been answer strategic planning. That was... Benefits management. Yup. That will not happen. They did not do that before. Networking. Combining not doing it before and not doing it after. Yeah, and they self-monitor a lot. The post project would be it... Okay.
- Respondent: <u>40:59</u> So, I'm through with scale, now I got to pick which role or is it just singular or which roles in general?
- Interviewer: <u>41:08</u> In case it is impossible to isolate it to a single role then multiple roles.
- Respondent: <u>41:14</u> Yeah. Okay. Okay. Okay.

Respondent: <u>43:18</u> It's interesting because now that I'm answering a lot of these questions, I see retrospectively the journey that this particular client took was to try to move away from the PMO as a control organization and more into the other three types from an identity perspective. So, I'm a lot of these are starting as a control mechanism and then pivoting into those others.

Interviewer:	<u>43:45</u>	This is very interesting to see. I also think would be the trend overall. But it is interesting that you have this reflective moment by reading it.
Respondent:	<u>44:11</u>	Yeah. So, like I'm back down to the providing a set of tools that used to be a mechanism control and now they view that as more of a service offering.
Respondent:	<u>47:38</u>	Almost done.
Interviewer:	<u>47:42</u>	Nope, no rush.
Respondent:	<u>48:11</u>	Okay. Populated everything on sheet one. Okay.
Interviewer:	<u>48:16</u>	Yeah, that's the only one. She who's just a role described again by the, the street dew only has the, the role of describe is.
New Speaker:	<u>48:29</u>	I send it back to you test stick.
New Speaker:	<u>48:33</u>	Okay. Well I'm going to run through this audio in a few days. Transcribe it and get it back to you.
New Speaker:	<u>48:41</u>	Okay. Great. Holidays. Anytime.
New Speaker:	<u>48:43</u>	So sorry, are you planning holidays? Anytime? Yeah.
New Speaker:	<u>48:50</u>	A couple of weekend trips, but the big thing is a, I have a baby boy going to be born in October, so I'm looking very much forward to that. Fantastic. Congratulations.
Respondent:	<u>48:59</u>	Thank you.
Interviewer:	<u>49:00</u>	Congratulations. I hope to have this done before then because, well, my hard deadline is in September.
Respondent:	<u>49:07</u>	There you go.
Interviewer:	<u>49:10</u>	I'll, I'll send it to you as soon as I have it ready.
Respondent:	<u>49:13</u>	Right. That's on its way.
Interviewer:	<u>49:15</u>	Yes. Well thank you for your time. Thank you for participating in this and we'll keep in touch.
Respondent:	<u>49:22</u>	Sounds good. Thank you. Good luck.
Interviewer:	<u>49:23</u>	Yeah. Thank you. I'm going to stop recording right now.

H.2.2.2. Survey Responses

Group	ID	Function	Period	Value	Role
and Project	1	Report project status to upper management	0: Traditional	5	СТ
Pro			1: Agile	4	CR, CT
o	2	Monitoring and control of project performance	0: Traditional	5	СТ
			1: Agile	4	CR, CT
fonitoring ontrolling erformance	3	Implement and operate a project information system	0: Traditional	5	SP
Moi Con Perf			1: Agile	4	SV

Group	ID	Function	Period	Value	Role
	4	Develop and maintain a project scoreboard.	0: Traditional	5	СТ
			1: Agile	4	SV
ent	5	Develop and implement a standard methodology	0: Traditional	3	СТ
geme			1: Agile	5	SP
anag gies	6	Promote project management within the	0: Traditional	5	CT
Development of Project Management Competencies and Methodologies		organization	1: Agile	3	CR
oject	7	Develop competency of personnel, including	0: Traditional	2	CK
Prc 1 Mc		training	1: Agile	4	SV
of s and	8	Provide mentoring for project managers	0: Traditional	4	SP
nent			1: Agile	5	SP
lopn	9	Provide a set of tools without an effort to	0: Traditional	1	CT
evel omp		standardize.	1: Agile		
ДÜ	10	Coordinate between projects	0: Traditional	1	SV
	10		1: Agile	5	CR CR
	11	Identify, select, and prioritize new projects	0: Traditional	5	CR, SP
t		radiary, server, and protraze new projects	1: Agile	1	SP
Multi-Project Management	12	Manage one or more portfolios	0: Traditional	3	CR
agei	12	Manage one of more portionos	1: Agile	5	CR
Man	13	Manage one or more programs	0: Traditional	5	SV
ect]	15	Manage one of more programs	1: Agile	5	CT
Proj	14	Allocate resources between projects.	0: Traditional	5	CR
ulti-	14	Anocate resources between projects.	1: Agile	4	
Ŵ	15	Drovido odvico to una monocoment	0: Traditional	3	SP
	15	Provide advice to upper management		5	CT
	16	Destisients in starts size also size	1: Agile 0: Traditional	5	SP
	16	Participate in strategic planning		2	
	17		1: Agile	3	SP
	17	Benefits management	0: Traditional	NA	
	10		1: Agile	2	SP
	18	Network and provide environmental scanning.	0: Traditional	NA	
	10		1: Agile	NA	
	19	Monitor and control the performance of the PMO	0: Traditional	5	СТ
	2.0		1: Agile	5	CT
	20	Manage archives of project documentation	0: Traditional	2	CT
			1: Agile	3	CT
ent	21	Conduct post-project reviews	0: Traditional	2	СТ
Strategic Management			1: Agile	3	СТ
lana	22	Conduct project audits	0: Traditional	5	СТ
ic N			1: Agile	5	СТ
ateg	23	Implement and manage a database of lessons learned	0: Traditional	2	СТ
Str			1: Agile	3	SP
	24	Implement and manage a risk database.	0: Traditional	4	СТ
			1: Agile	3	SP
	25	Execute Specialized Tasks for Project Managers	0: Traditional	5	CR
ler			1: Agile	3	CR
Other	26	Manage customer interfaces	0: Traditional	NA	

Group	ID	Function	Period	Value	Role
			1: Agile	NA	
	27	Recruit, Select, Evaluate, and Determine Salaries for	0: Traditional	5	СТ
		Project Managers	1: Agile	5	СТ
	28	Project administrative support	0: Traditional	5	CR, SP
			1: Agile	5	CR, SP
	29	Work-family equilibrium	0: Traditional	4	SP
			1: Agile	4	SP
	30	Developing the change management database	0: Traditional	1	CR
			1: Agile	3	SP
	31	Portfolio problem solving	0: Traditional	4	СТ
			1: Agile	4	SP
	32	Cost/benefit analysis of projects	0: Traditional	1	
			1: Agile	3	SP
	33	Risk management	0: Traditional	4	СТ
			1: Agile	4	СТ
	34	Project/program delivery management	0: Traditional	5	СТ
			1: Agile	4	CR
	35	Project management benchmarking	0: Traditional	5	SV
			1: Agile	5	SV
	36	Managing stakeholders	0: Traditional	5	СТ
			1: Agile	4	SP

H.3 Case C H.3.1. Interview with PMO

Date: 14/08/2019 Time: from 11:00 until 12:00 (UTC+01:00) Location: Virtual. Recording: Skype Broad cast and Android recorder. Interviewer: Henrique Cleto Carneiro

H.3.1.1. Transcripts

Interviewer:	<u>00:00</u>	I'll record this with Skype and also record a backup with my phone, which is already in- flight mode. Perfect. Yes, please continue. I'm sorry to interrupt.
Respondent:	<u>00:13</u>	Okay. So, my team here at the client side, we are involved in now five programs means five release trains and we are about to take over even another it's an own SAP portfolio that support from PMO site. And basically, this is what I was referring to, that candidate I proposed a part of different programs here.
Interviewer:	<u>00:39</u>	All right. You mentioned a release train. So, is it safe to say that you're using safe?
Respondent:	<u>00:48</u>	Yes, exactly. The client is working after safe and I'm so far overall at the, at the program level here. Having several release trends, in my opinion, it could be a solution level already because especially the programs I'm involved in the different release trains, there's a lot of dependencies and it would make sense to make a solution train. But yeah, this is, has not happened so far.
Interviewer:	<u>01:18</u>	Well the SAFe method, they specify the PMO with being the lean portfolio management competence. I always have a problem with the specific name that they use. But you're saying

		that you already have it on the program level so yeah. It's the client adapting the methodology to its needs.
Respondent:	<u>01:45</u>	So that's the point. I mean they are working, I guess. Yeah. I mean they are really working overall after safe and it's quite well implemented here. But the whole PMO related topics, not really. I mean first of all after safe at program level, PMO is not really foreseen. Right? I mean it's changing now but it's the RTE supposed to do the stuff what we basically do. And I asked at the, at the safe conference also safe guy and I mean we talk always about doing agile and SAFe et Cetera. But then who's really doing financials et cetera? There's not so much talk about it. And this guy told me yeah it was always supposed to do the release train engineer. Obviously, it's not working right. If you are having released trains with up to a hundred and 120 persons, it's a big thing.
Respondent:	<u>02:38</u>	Release train engineer is about to coach and making sure all other safe and methodologies and stuff is applied. Yeah. And he's content wise quite a lot involved. So obviously you need a PMO and this is what we are doing here, but it's not at all to answer your question, it was long answer, sorry. Eh, lean budgeting and everything is foreseen as per the safe framework. It's not happening at all, but they not, this is really a topic at the top management here. They want to somehow introduce a capacity-based model which would correspond to this lean budgeting approach and they started pilot next year. But for me it's a bit, to be honest, a bit ridiculous because it's a very, very small release train now. And this is, yeah, capacity wise, maybe it will be if I, if I can turn a number, it's maybe a 4 million thing.
Respondent:	<u>03:37</u>	So that is not really, I guess what is meant with lean budgeting solution train approach. But because we have programs which are much, much bigger and that'd be struggling a lot because the budget is completely split and it's enormously split. Let's say for x, but if you have a program that say capacities did, it's always based on one-year planning. That's how it is here. You would need 12 million for the whole capacity money-wise, you get up to 50, 60 different looking codes and that's how the budget is split. And then you can understand how complex it is. So that is obviously totally against everything that SAFe says, but it's reality.
Interviewer:	<u>04:21</u>	All right. In a way it's also the PMO scope to bridge the old infrastructure that's already there on how to budget, how to report budget and the new safe methodology.
Respondent:	<u>04:37</u>	Yes. And I mean to be honest we are not so much taken into consideration, unfortunately because exactly these budgeting things, this is really also for sure 70 80% of our time goes to this controlling stuff because it's very unlikely what we do. But we manage all the financials here from client site as externals. And as I said, it's a management topic. And the leads are in discussions, but we were not even asked. Which I honestly do not really understand because we are the ones managing this, right. So that is not so very fortunate but can be still because we are external. So, it's a very client internal discussion but not very, I mean normally we are taken into consideration obviously if when there is a trust relationship. So, I also do not understand and the other hand by we are not involved here because we are, for sure, the ones who give on these things the most input. And as what is happening indeed that is on several other topics, let's say for example PI planning I guess in one of the programs be a really We moved into a very interesting direction for example, that we start to sit with a RTE forehand of the PI planning always and be obviously don't only do this admin, classical PMO support roles in book the room for Pi Planning, but actually you are not involved at all. But we sit really together, we look at the plan scope. You try to make calculations how much story points that would be. Because we have calculated just certain story point cost sector based on the actuals and the monthly burn rates. And this is really interesting stuff. I think. This is moving into the right direction. But we ourselves also move, build up a bit more our role and move towards a more agile PMO role.
Interviewer:	<u>06:38</u>	Fantastic. That is fantastic to hear. So, you mentioned a few functions that are clearly related to the agile transformation. For instance, this last one this forecasting of burnout and estimated costs in this new model. Is there anything else that comes to mind that are tasks that the PMO only performs because of the agile methodology that you implemented.
Respondent:	<u>07:09</u>	Yeah, I'm for sure. I mean we have agile KPIs. That's a sure one very important topic. I mean, the KPIs to do obviously always in a waterfall environment, but clearly in a SAFe

		environment it's very specific, agile KPIs. And it's something that is permanently evolving. So, we started with the very classical ones, the committed versus delivered story points, velocity, et cetera. And this is really an interesting thing because you're part of the whole progress of the whole, I'm release strain here, right? So, then we started, obviously agile is closely linked to Dev ops and you started take up this kind of KPIs. So, that for sure. Then what we have at the client also would go in this direction is that we be, we are under time and material contracts, but you can do it in an agile environment. But obviously you want to move towards an outcome-based contract thing and here this is required from client in here also we are not obviously having any involvement in setting this up, be it KPIs based, be it outcome-based contracts sould be considered as being agile contracts. Right. Yeah. So that would be the most obvious examples for me.
Interviewer:	<u>08:32</u>	All right. All right. What's you Ah, let's see. Would you say that there are some, you mentioned that some of the tasks that the PMO will usually do are redistributed to release train engineers? I mean in this case in particular, in this firm in particularly.
Respondent:	<u>08:57</u>	Okay. Sorry. Can you repeat? What is the question here?
Interviewer:	<u>08:59</u>	Well, some of the normal functions the historical functions of the PMO, are reduced an taken by the release train engineer and other roles in the organization, positions in the organization. Would you say that that happened in this firm?
Respondent:	<u>09:21</u>	No, I don't think because So, I'm in for two and a half years in this whole SAFe stuff is going on for much longer. But as far as I know, there was always a PMO. Also, in my opinion, it's to say, so they did the right thing because they saw either in the program or release train you need a PMO. That the safe framework. So basically, they were somehow against SAFe framework, right? So, they did it in practical, which now is considered to be how it should be in this, this whole SAFe stuff. They come on more also to the opinion and, but it was not foreseen really and now finally found the role. And her it was however always done. But at the same time also never called an agile PMO. Oh, it was just you know, I think it was considered to be kind of a hybrid thing. Something you'd take over from the old word. Yup.
Interviewer:	<u>10:17</u>	Is there any task that you think have been redirected?
Respondent:	<u>10:23</u>	Mm, I wouldn't. Yeah. So, what is for sure happening and that is really the artist for us very cool thing and important thing about agile PMO. Agile PMO per say, your role is much less overhead and admin because this whole agile approach and way of thinking makes the team much more proactive. Right? So, for example, I know good examples is always the old-world risk and issues tracking. So normally as PMO you're responsible of tracking it and taking risks up onto some SharePoint, whatever it is. I'm here for example, we are zero involver because every team proactively opens the items, the risks in JIRA instead. And then this is discussed in, in our case, in scrum of scrums. Of course, you have other programs tested separate meetings, but we are not involved at all. Which in the old world. Also, I mean, what is, of course, you can also have risks on the PMO side, but as you're just the one who needs to take up this task, it's just an admin task for you.
Respondent:	<u>11:25</u>	And this for sure, let's say it's redistributed to all team members, which is really good. Obviously. And overall also for sure. Another important topic is, and it sounds a minor thing, but it's a big thing. This PMO, can you book this in that room? It's like, yeah, I have a very stupid admin task. I mean here, even lead, everyone just does it normally on its own. And it's the point that this is things I do not understand that is PMO or they're permanently only occupied with this kind of flows, but it's like ridiculous. PMOs, also I have a, I mean, yeah, it's good people, they have their qualifications. So, no one should do only this kind of things and much better if it's proactively done by everyone on its own. So, let's say really the pure admin and very much overhead tasks, very much limited and distributed to other roles per se or other people. Yeah.
Interviewer:	<u>12:35</u>	All right. In a more qualitative sense. Would you describe that any of the new acquire tasks up and will for instance, adapting the KPIs with the SAFe methodology are a pain are in that could be improved or maybe let go?

Respondent:	<u>13:01</u>	So he I mean what I can say. So, let's say, and it is for some programs a pain because is so often improvements required a normally also, we have a normal day to day task and services we've agreed and delivered. And if you always work on this ad-hoc improvement level, obviously it's quite an effort for you, capacity-wise, but per se it's not a pain. I mean obviously it's interesting on and on the other hand it's not really related to SAFe somehow, you know, I, and to be honest, I don't know what SAFe says regarding agile KPIs, but I would say they don't really tell you anything here. No.
Interviewer:	<u>13:48</u>	Right. It doesn't have to be specifically the SAFe, I'm just mentioning the SAFe, because so I understand is the main trend on agile transformation there. But related to agility in any sense.
Respondent:	<u>14:03</u>	Yeah. But I would say in, that's the points I said we started with the classical ones, for sure. This you can find from ever it comes. Right. But I think where we are heading towards to is really not based on any Okay. For sure. It might be eventually existing somewhere. But the way it goes, it's rather that you really talk then like the architects is involved obviously if it's about DevOps KPI's. Yeah. And some developers. Then we also have some specific testing, automated testing, KPIs, these things. Then obviously the tester is involved, so it's something really that's decided by discussing. But that's how it comes in. And I could not even tell you if there are some. If these standardized ones existing already. And I wouldn't even say so because especially for DevOps, I also guess on the ground it's quite advanced here, so, yeah.
Interviewer:	<u>15:02</u>	Okay. Okay. So, you mentioned Dev Ops as well. And would you say that besides the transformation towards SAFe, or almost SAFe or further than SAFe and Dev ops transformation. Are there any other big transformations in their organization at the same time?
Respondent:	<u>15:26</u>	So DevOps and cloud for sure those are the big topics. Then, I know we are This whole agile stuff is on the it side and it's supposed to start, should ideally start also on the whole enterprise level. So, what's the including business, but I don't know if there's really, I mean I know we have some coaches in a bit with this purpose, but I think it's very minimum what's happening, but I guess, yeah. Vision strategy-wise would also be a big transformation planed in future, which makes sense obviously, right? If only the it side is agile and the rest is not, makes not so much sense. These would be the big topics I'm aware of. Until also. However, for sure from a technical tip, there's much more going on, but I'm just not into that and the right person to ask.
Interviewer:	<u>16:24</u>	Okay. Okay. Let's see. Would you, and in another a light, would you say that any of the newer acquired activities are a benefit, are much better than they would have been in Waterfall?
Respondent:	<u>16:44</u>	You mean of what we do here now?
Interviewer:	<u>16:47</u>	Yes, yes.
Respondent:	<u>16:49</u>	For me, everything.
Interviewer:	<u>16:51</u>	Everything is a benefit?
Respondent:	<u>16:53</u>	And, and I can really say like I was before two years in it absolute, this classical waterfall environment. It was a big SAP implementation and it was the most waterfall you can ever imagine with really micromanagement. Really very top down hierarchy. So, and to be honest, I mean it was my first project for Accenture and it was fine because you don't know better. But looking back now, it's exactly how I never want to work again. And I really say that, and people say obviously as a PMO you need to know both worlds. And I can tell you I know both worlds. And still, I never would go back and away from agile because most of all, it's obviously the tasks and everything you do, it's different. But as I mentioned, it's the whole mindset. There is no hierarchies and it's really true. And as I said, and I think this meeting room booking and all sitting in a free open space.

Respondent:	<u>17:55</u>	So that is still, yeah, indicating that there is not, Oh God, this is the boss. You know, and you need to do everything for him and it, this is not, it's not happening here. And that is really, really nice. At least up to a certain level. I mean I'm not talking about top top management here at treaty on onstage at the next levels here. Direct to MD wise. It's really super, let's say quite relaxed and it, yeah, nothing had at all related to top down. That's why I like it and I could really not imagine going back.
Interviewer:	<u>18:31</u>	Okay. Okay, perfect. Oh, I guess I have one activity and one mother a question. It is actually quite extensive. So, I think you might rather do it on your own time and get back to me later. I will send you an email with a list much like this one. Let's see. It's a very extensive list and it's very hard to fit in the camera. But what it is, it's based on my literature research, there are several different functions that the PMO perform and I divide this table, those functions. And I would ask you to fill in a scale between, one this doesn't relate at all to my PMO to five is very relatable to my PMO and there is also on applicable, there's things that we absolutely don't do not do and have never done. Yeah. And as well as describing it in one of the roles that I provide as well. So, there is one slide that I could show you. That makes some sense. In my research I came up with this first obstacle, which is how do I define a role, there are several different ways of defining it. Some people say that the role is the job description. Some people say that the role is, a thing that you have when your share responsibility in the task. Some say the role is some abstract level of aggregation of functions. And I
Respondent:	<u>20:21</u>	This is coming a bit from the traditional like PMI definition of roles, right? It, kind of, is. It is. It really is this related to agile PMO because I read it and I did the PMI lately and I'm wondering: is it from the there? Is it out of some really agile PMO?
Interviewer:	<u>20:42</u>	Neither. Neither. So, there is some So, the PMI has some of those roles as well. Well it, it basically comes from different literature, both traditional and agile. And what I, what I say here is that I make an analogy with the performing arts. So, when you have a story, you usually have a main character that has a leading role and it drives the story to an end, beginning, a middle and an end based on his decisions. And they have supporting roles with supporting characters that their decisions influenced the environment in which the main character makes their way, makes that decision. If the complex enough, you cannot tell which one is the main character and which one is the supporting character because their stories are intertwined, and they change roles in different points of the story. So, what I'm proposing is that the firm is a very complex story and it's so complex that it doesn't make sense to talk about leading and supporting roles.
Interviewer:	<u>21:57</u>	Even though I have a supporting role here and there are actually several different kind of roles, the most prominent among the PMOs are these 4. The coordinating that is related to resourcing and budget allocation. The controlling that's more related to measuring and reporting and forecasting. The supporting role, which is about training transferring knowledge and giving the teams the environment that they need to perform. And the serving role, which is related to very specific service that only the PMO would have the knowledge and the experience, the expertise to perform. And that, my assumption here is that the functions of the PMO don't change that much, but the roles they assume while you're performing that functions will change with agile.
Respondent:	22:56	That's a difficult one.
Interviewer:	<u>22:58</u>	That could be, but I don't want to bias your response. I would like us all to be proven wrong. It's, it's always good. But do you think that there's a real missing? You seem sceptical.
Respondent:	<u>23:13</u>	I don't know. You know, but I just have, and I don't think this to be honest, I don't think it's related to, for me, I think which role is not the question and it's not related to waterfall or agile. Is rather that I would say it's difficult to tell if you're a role one role because it's a mixture, right?
Interviewer:	23:38	Yes, yes. I understand, but sometimes
Respondent:	<u>23:40</u>	And then it also depends on which environment. But it's true. If it's still part from the changing in an agile environment, could indeed be, yeah.

Interviewer:	<u>23:51</u>	Yeah. It's for instance some functions in this list Well cost benefit analysis of projects it could be a supporting role thing. And in waterfall for instance, they are supporting the team that actually does this this cost benefit analysis. They are training them and under agile this becomes an ad hoc function that they do under requests and they do it or being specialized. Then they're assuming a serving role. So that would be the difference from before and after. And also, it may consist on a very small portion of their time before agile. Yes. I say that this would be better if you did it on your own because of your time budgets, but I also could be on the line. While are you doing it? And you could solve questions on the fly.
Respondent:	<u>25:03</u>	So for me, I think we can also do that. I mean it depends. Like time-wise we still have like 25 minutes left. If you have still many questions. Let me let me do it later. Else I can do it. I don't think it will take too long to be honest.
Interviewer:	<u>25:19</u>	All right. All right. That's good to see. I actually have only one more question and it's a very open ended one. Is there anything that I didn't ask you and that you would like that it's fundamental to understanding the PMO at this firm?
Respondent:	<u>25:40</u>	Yeah, maybe one comment. Just that we. So, we talk about all the time we talk. It can be that it's really good what you about to research agile PMO, but PMO in an agile environment. Right. But we also say clearly this is one path. Agile PMO related, the other part is that you as a PMO team work agile yourself and this is however not related to an agile environment because you can also be in the waterfall environment and still you can decide within your PMO team we work agile, right? And we understand here that you use Kanban, that you use certain scrum ceremonies which normally stadium retrospective, which makes sense. So that would be the only like We consider agile PMO these both things, right? Like the part where we do, we are now how it is to work in an agile environment SAFe in this case. But then the other part is also, yeah, that you yourself work.
Interviewer:	<u>26:40</u>	Yes, I understand. I from what I'm seeing most in the cases is that we're talking about a PMO in an agile environment.
Respondent:	<u>26:56</u>	Yeah. This is really a topic yet. Yes. Maybe as a side note, just, I don't know that, that this is, I mean at least we a bit also what OTHER GROUP IN ACCENTURE for example, they do, right there is these two ways and you clearly focusing on this in an agile environment, but this is also part of agile PMO, right? To mention. Yeah.
Interviewer:	<u>27:19</u>	The ways that they work internally. It would be in a sense it would be quite contradicting if they were in an agile environment working waterfall themselves. But it could be.
Respondent:	<u>27:36</u>	Yeah, but that's the point. Believe me, it happened. We also just, I mean we are in the agile environment two and a half years and we started only after one year using ourselves Kanban, et cetera. That's the interesting part about it because often what happens with PMOs, also is a bit like, yeah, I'm okay. Okay. And then I mean I do as I want. and then, yeah, I know. I mean, it's an environment I need to adapt. I need to do specific tasks but does not mean that I need to change my internal team way of working. Often that you think that automatically while we are a PMO in an agile environment, so we are so agile ourselves, you know, and for us it indeed also just happened some month later that we said now obviously we also should start then to work agile. So, let's try Kanban and try daily meeting et Cetera. But that's why it's not per se that the PMO working in an agile environment that they are so agile themselves. That's indeed interesting, and it seems contradictory, but it is the case I would say.
Interviewer:	<u>28:43</u>	So you'd say that for instance, the PMO as it is right now, implementing the first steps into agile ways of working themselves. Do you see it being more capable at adapting to change?
Respondent:	<u>29:01</u>	I would say yes that. Then for sure. On the other hand, you can also see it like if you are in a waterfall environment and you start as a PMO and let's say really all the other is still, nothing going on agile transformation. It's really clearly waterfall. You start within the PMO team to work agile. It could be even that you would in the outside of the PMO team, I don't know From the interior of the PMO team, you start then to somehow give some push towards the outside that towards the other teams. That start work agile, right. It's not, it can be indeed. We had to also requests coming to us. So yeah, the client what about

environment? And we have the idea to start with the PMO working agile and then by this eventually stat an overall agile transformation. So that's also an interesting,

Interviewer: <u>29:59</u> From the inside out spread of culture? All right. That's a good topic. So, drivers of change.

- Respondent: <u>30:09</u> Exactly. And this is what we also tried to get into more, right? It's not only these agile coaches, it can be indeed really us the PMO the driver of change of change. If it's existing, obviously you support it. But why not even being the starting point. Yeah. New perspective somehow. But indeed, why not, right?
- Interviewer: <u>30:28</u> Yes, yes. I will forward you the list right now and yes, I would like to thank you for the, and we've managed to make the timeline for your original meeting, but I couldn't guarantee it. I couldn't guarantee it.
- Respondent: <u>30:49</u> No, no, no. And always better 15 then I can do the list now and, and send it back to you. That's also good, right?
- Interviewer: <u>30:56</u> Yes, it is. It is. That'd be, just send it to you. Yeah. In a way, it's good that the list of roles is somehow similar to PMI. It means that they didn't get it go wrong. Yeah. Okay.
- Respondent: <u>31:37</u> So I have the list and then I just need to go through and..
- Interviewer: <u>31:42</u> There are check box you can click.
- Respondent: <u>31:45</u> Okay.
- Interviewer: <u>31:51</u> If you have any questions I'm here
- Respondent: <u>32:10</u> Okay. And then, yeah, it's good that you're in see. So, so the scale from one to five, what does it mean? Like in the, for example, replied project status. So, but what do I do with them? Am One, two, three, four, five. How much I did it. How much of what...
- Interviewer: <u>32:32</u> And how, how much do you think that this function belongs to the PMO? It's related to the PMO. Yes. So very related. Or least related.
- Respondent: <u>32:42</u> Okay. Yeah. Okay. Well, however, can I get to the five? Is it, is it for only the highest? Yeah. It's far the highest you can get, but they don't see it. Yeah. Maybe we need to make it bigger. My children I see on onto up to four and I tried to be shaped by her now. Okay. It wasn't shifting now. It's good. I see it now. Yeah. And as I said, the roles, I find it a bit difficult, but can I take two also?
- Interviewer: <u>33:45</u> Yes. I understand that it might be very hard to separate them.
- Respondent: <u>33:52</u> Yup. Yeah. Then then it's indeed, you know what I see now it's a bit like in the waterfall before word, it would be them, the coordinating and controlling. And now with agile, the last to the supporting and the serving role is this transferring knowledge conducting training. This is new. This you wouldn't do in the old world in my opinion. Okay. Implement and operate a project information system, what is meant by that? Number three.
- Interviewer: <u>35:26</u> Yes, it would be like SharePoint. Where you keep the information.
- Respondent: <u>44:38</u> Okay. I'm nearly done.
- Interviewer: <u>44:43</u> I'm also worried about your time.
- Respondent: <u>45:21</u> Okay, then I sent it back to you. Yeah,
- Interviewer: 45:25 That'd be great. That'd be great.

Respondent:	<u>45:27</u>	Okay.
Respondent:	<u>45:35</u>	What'd you think about the list? Do you think that's anything I'm missing in the list?
Respondent:	<u>45:39</u>	No, it's very good and it some, I don't even, I'm not at all in touch with some, but else it's really good and it's interesting when you do it yourself because you realize some things really change. For example, for the agile, I basically, they always clicked all four rows because you cannot, you know, you do so much. Also Training, advisory, coaching, et Cetera. And for the old world it's always this to CT and the, let's say, the most standard ones. You don't really do coaching, etc. Then, yeah, it's really some tasks you only do in the old world. It's, it's obsolete in the new word, but everything related to more somehow out of this pure delivery, right. More, but also more towards stakeholder management. So, try this. You do much more in the new world, for example. It's interesting for yourself going through your questions to be honest.
Interviewer:	<u>46:41</u>	Well, it is good that it was helpful. Nice. Good feedback. Well, thank you for your time again. I'm now going to proceed to transcribe the interview and I'm done. I'm going to send it back to you. You can check if I did any mistakes or any misconceptions. Right. Okay.
Interviewer:	<u>47:02</u>	I will stop recording now

H.3.1.2. Survey Responses

Group	ID	Function	Period	Value	Role
Controlling	1	Report project status to upper management	0: Traditional	5	CR, CT
atrol			1: Agile	5	CR, CT, SP, SV
Col	2	Monitoring and control of project performance	0: Traditional	5	CR, CT
and mance			1: Agile	5	CR, CT, SP, SV
of.	3	Implement and operate a project information system	0: Traditional	4	CR, CT
Perf			1: Agile	3	CR, CT, SP, SV
Development of Project ManagementMonitoring Competencies and Methodologies Project Perf	4	Develop and maintain a project scoreboard.	0: Traditional	3	CR, CT
Pro			1: Agile	3	CR, CT, SP, SV
nen	5	Develop and implement a standard methodology	0: Traditional	4	CR, CT
agei es			1: Agile	4	CR, CT, SP, SV
Development of Project Manag Competencies and Methodologies	6	Promote project management within the organization	0: Traditional	4	CR, CT
ct] nodo			1: Agile	2	CR, CT
roje Meth	7	Develop competency of personnel, including training	0: Traditional	NA	
of F nd N			1: Agile	4	SP, SV
nt c ies a	8	Provide mentoring for project managers	0: Traditional	NA	
pme			1: Agile	4	SP, SV
velo	9	Provide a set of tools without an effort to standardize.	0: Traditional	NA	
Col Co			1: Agile	NA	
	10	Coordinate between projects	0: Traditional	4	CR, CT
			1: Agile	4	CR, CT, SP, SV
lent	11	Identify, select, and prioritize new projects	0: Traditional	1	CR, CT
gem			1: Agile	2	CR, CT, SP, SV
Multi-Project Management	12	Manage one or more portfolios	0: Traditional	2	CR, CT
sct N			1: Agile	4	CR, CT, SP, SV
roje	13	Manage one or more programs	0: Traditional	4	CR, CT, SP, SV
lti-F			1: Agile	4	CR, CT, SP, SV
Mu	14	Allocate resources between projects.	0: Traditional	3	CR, CT, SP, SV

Group	ID	Function	Period	Value	Role
			1: Agile	4	CR, CT, SP, SV
	15	Provide advice to upper management	0: Traditional	2	CR, CT
			1: Agile	4	CR, CT, SP, SV
	16	Participate in strategic planning	0: Traditional	2	CR, CT
			1: Agile	4	CR, CT, SP, SV
	17	Benefits management	0: Traditional	1	CR, CT
			1: Agile	4	CR, CT, SP, SV
	18	Network and provide environmental scanning.	0: Traditional	NA	
			1: Agile	NA	
	19	Monitor and control the performance of the PMO	0: Traditional	NA	
			1: Agile	3	SP, SV
	20	Manage archives of project documentation	0: Traditional	5	CR, CT
It			1: Agile	2	CR, CT
	21	Conduct post-project reviews	0: Traditional	NA	
smer			1: Agile	NA	
nage	22	Conduct project audits	0: Traditional	3	CR, CT
Mai			1: Agile	3	CR, CT
egic	23	Implement and manage a database of lessons learned	0: Traditional	1	CR, CT
Strategic Management			1: Agile	4	CR, CT, SP, SV
Ø	24	Implement and manage a risk database.	0: Traditional	4	CR, CT
			1: Agile	1	CR, CT
	25	Execute Specialized Tasks for Project Managers	0: Traditional	4	CR, CT
			1: Agile	2	CR, CT
	26	Manage customer interfaces	0: Traditional	NA	
			1: Agile	NA	
	27	Recruit, Select, Evaluate, and Determine Salaries for	0: Traditional	NA	
		Project Managers	1: Agile	NA	
	28	Project administrative support	0: Traditional	5	CR, CT
			1: Agile	2	CR, CT
	29	Work-family equilibrium	0: Traditional	2	CR, CT
			1: Agile	4	CR, CT
	30	Developing the change management database	0: Traditional	NA	
			1: Agile	NA	
	31	Portfolio problem solving	0: Traditional	2	CR, CT
			1: Agile	3	CT, SP, SV
	32	Cost/benefit analysis of projects	0: Traditional	4	CR, CT
			1: Agile	3	CT, SP, SV
	33	Risk management	0: Traditional	4	CR, CT
			1: Agile	1	CR, CT
	34	Project/program delivery management	0: Traditional	4	CR, CT
	1		1: Agile	4	CR, CT, SP, SV
	35	Project management benchmarking	0: Traditional	4	CR, CT
			1: Agile	3	CR, CT
	36	Managing stakeholders	0: Traditional	4	CR, CT
Other					

H.3.2. Interview with Release Train Engineer

Date: 21/08/2019 Time: from 10:00 until 11:00 (UTC+01:00) Location: Virtual. Recording: Android recorder. Interviewer: Henrique Cleto Carneiro

H.3.2.1. Transcripts

Interviewer:	<u>00:00</u>	We are now being recorded on my mobile phone, which is very close to the speakers of the computer. So it should be fine. I would like to start with some demographic questions on the case. First of all, how many employees does this firm have? Before you answer, sorry. If at any given moment we say your name, the name of the company, my name, anyone's name. When I'm transcribing the texts, these will be anonymize.
Respondent:	<u>00:38</u>	Yes. I think company has about 40,000.
Interviewer:	<u>00:49</u>	Perfect. Perfect. And how many teams are working in With agile methodologies?
Respondent:	<u>01:01</u>	I would say I think it is more than 50% of IT portfolio. It's hard to judge, but I guess maybe a couple thousand people. I would say maybe I've been the it staff might be about a third of it. So somewhere in 10,000. So, I guess as I might be applied by two, three, four, 5,000 people or something like that.
Interviewer:	<u>01:36</u>	What methodology or methodologies would you say are employed in the firm?
Respondent:	<u>01:50</u>	Specifically in the agile environment, I think that ranges. The teams I'm currently working use SAFe, scale agile framework largely. There will be individual scrum teams that just sort of follow the just follow the scrum methodology as a smaller team. There's going to be Kanban style teams. I know there's teams that follow the LESS framework. And I'm sure that there is sort of everything from like also your classical waterfall approach being applied in certain areas .and I'm sure there's a bunch of hybrid sort of patterns, that either are in transition or try to follow a best of breed approach.
Interviewer:	<u>02:39</u>	Why would you say that there are so many different methodologies, being employed?
Respondent:	<u>02:48</u>	I think that that's sort of driven a bit by the size and by a decentralised structure that we have in the IT department or in the IT departments. So I think to one side we have some sort of regional aspect to what one region may find of one framework being a little more useful than other with the other framework. And then there is definitely for different projects, I mean the one framework is a little more relevant or helpful for them to deliver their goals and another project maybe is more For example from a classical nature, that employs a pretty strict waterfall planning.
Respondent:	<u>03:40</u>	Well, I think that's what would be the drivers that I can see.
Interviewer:	<u>03:48</u>	So you said that the it department is then scattered in different regions. Countries or continents, is that right?
Respondent:	<u>04:01</u>	Yes, it is a global firm. So we have a few departments. So we have an extend in Switzerland. We have in the European area an in America of course, and then in Asia Pacific as well with implementation partners across the globe as well.
Interviewer:	<u>04:29</u>	Okay. Alright. And what, how would you describe your role in the company?
Respondent:	<u>04:42</u>	I'm a, I mean the, in our Scaled Agile framework, it's called a release train engineer, a delivery lead for one agile release train. I think it's called a program in that sort of more and more classical terms, but I'm taking care to deliver a CRM platform with our team.

Interviewer:	05:16	Do you have, the lean portfolio layer of SAFe in place? The, the, the reason why I ask is
		that SAFe prescribes the PMO in that layer. Would you say that your PMO in the firm is similar to that one or somewhat different?
Respondent:	<u>05:44</u>	We have a portfolio management structure. I mean we are not so scaled agile out from the book. I think that there is a mixture of a maybe sort of classical roadmap planning process, or budgeting prioritisation process. And the agile or the scaled agile practice keeps in the programs or the agile release trains even slightly above when you aggregate several agile release trains in the value stream. So that happens. Yeah, but I think that it sort of breaches or like changes a bit to the more classical approach on the whole budgeting and portfolio management. Now, I think the question is In PMO We have sort of a PMO team on the, on the program level in the agile release trains and there is also PMO staff or teams that supports the value stream as such. Oh,
Interviewer:	<u>07:14</u>	Okay. Are they connected somehow?
Respondent:	<u>07:21</u>	I mean their work is connected. So, yes, there's definitely collaborations, but it's I think more attached to the value stream lead when you work with the PMO team that is helping him to run the value stream. There is the team that helps me or us running the agile release train. So, it's not, I mean the connection is rather from the PMO team to the agile release train or to the value stream than within themselves. That from PMO to PMO is more sort of the internal collaboration relation.
Interviewer:	<u>08:08</u>	Okay. So let me just go back to this to make it clear for me. So the PMO in the agile release trains it's part of that structure and there is another structure in the value streams and they do cooperate. But there is no formal hierarchy or interconnection.
Respondent:	<u>08:31</u>	Correct. Yes.
Interviewer:	<u>08:33</u>	Which one then would you be able to comment better on the one's in the release trains or the ones in the value streams?
Respondent:	<u>08:47</u>	The release trains one, that the team I work with. That works with me.
Interviewer:	<u>08:53</u>	Perfect. And what'd you say that this structure a high level PMO and a program release, train PMO was always in place even before the agile transition or is this something new?
Respondent:	<u>09:13</u>	No, I mean I do suppose it's there ever since. It's, I think, I mean that's not something that came with agile. So there's always these PMO teams that support several layers of aggregation.
Interviewer:	<u>09:32</u>	Alright. Right. Are the PMOs in different release trains independent from each other?
Respondent:	<u>09:44</u>	They are independent from each other. We have for organizational purposes groups then for several release trains into sort of a one PMO group. But I would say that's more caused by some sort of benefits of scaling and sort of managing the people. But their work in that sense is relatively independent because I mean, it is the same thing, but yeah, I mean maybe it'll make so for some agile release trains there's a PMO group that takes care of several of the agile release trains so they can split their work better. But it's not a sort of across the board pattern that you have.
Interviewer:	<u>10:40</u>	Alright. Alright. How would you say it differs on the functions, on what they do the PMO in the value stream level and the PMO in the release train level? The scope of activities, I mean.
Respondent:	<u>11:06</u>	I think, I mean the one on the, on the, on the agile release train, it's more execution driven. We have a bunch of processes in the firm that we do the support or need to support in terms of budgeting and sort of reporting [inaudible] or sort of accounting for project funding or budgeting while on the agile release train that's more or less than sort of an execution focus, on how we deliver the projects and how change gets funded. I think on a value stream level that's a little more on a higher level, in a more portfolio management sense on what areas 163
		the firm wants to spend money they will help with business case creation and calculation. So I think it's more on the sort of little, a little more strategical level in the value stream and, and more on an execution level in the agile release train.
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Interviewer:	<u>12:33</u>	Well. In your view, are there any new functions or responsibilities that the PMO in the release train level acquired with the introduction of Agile?
Respondent:	<u>13:12</u>	I think the introduction of Agile
Respondent:	<u>13:21</u>	Yeah. What probably definitely changed the way how also the PMO team works or the demand for the PMO team. I think on one side with agile, a lot of things become a little less complicated or less overhead driven than in a classical approach. Because you will sort of more or less plan as you go and will not sort of spend a lot of time in keeping plans up to date and sort of keeping roadmaps up to date and budgeting, forecast up to date. So I think it's more a current snapshot view that the operating however I think exactly there, I would say the PMO group is very relevant to give very accurate measures on our state as it is right now. For example, in how much money do we currently, what's our current burn rate, what's our current delivery speeds, does it match, do we have any deviation? And I think that it sort of shifts from a executing a defined plan to a more product centric, more I mean the release train is driving, checking how fast is the train driving, how does it behave, how is its delivery? So I think that there is definitely a change in the sort of angle of what's the team tracks and reports and provides as an output.
Interviewer:	<u>15:15</u>	All right. So then this is a change of KPIs or is this a change on the way that they work or both?
Respondent:	<u>15:37</u>	Definitely there is a change in the KPIs. So in sort of the content of boards, do they measure, what do they provide as an output? I guess there's also a change in how they're supposed to work, how they organize their work. And in addition, I think it also is definitely a change in a more, I mean the, in in the agile environment you really want to also embrace the, the team's ability to figure out the best way how to operate things. So I believe that's also much applied on the PMO team to sort of have them understand themselves sort of in a, at least partial bottom up way on how does it make sense to track certain things out of it, make sense to organize and structure certain, for example, reporting processes. Which probably were more given top down in the past. Of course there's always a top down element in particularly when it comes to senior management reporting and certain such topics. But there are definitely, I think it changes in their sort of practice how they work but also in the KPI tracking you will work with these burned down charts, velocity numbers and stuff like that, which is something that in the old world it's something we were not aware of or are not doing in such a way.
Interviewer:	<u>17:11</u>	So in waterfall methodologies, even the ways that the PMO work are standardized and with agile they have room to make up their own, their own best ways of work. I discuss and see what works for them best. And also because of the nature that work is organized overall in the firm the KPIs change. Is that right?
Respondent:	<u>17:42</u>	Yes. Well I think both of them. Yeah.
Interviewer:	<u>17:46</u>	Perfect. Perfect. So in a way agile was less strict on how you should organize yourself?
Respondent:	<u>17:58</u>	Yes, I would, I mean I would say that quite an important pillar of the whole exercise.
Interviewer:	<u>18:04</u>	Fantastic. Fantastic. Would you say that there's anything that the PMO did in waterfall that they don't do now anymore. They got perhaps redistributed to other functions in the organization or that were just left behind?
Respondent:	<u>18:29</u>	I see. From my perception, I think there is definitely things that is left behind. I guess there's also certain things that get reallocated to other functions, but I think in general the main task I think remains as it was before. I would say with agile we try to really cut any overhead and waste and not value adding processes or tasks. And I guess in that sense, I think a lot of the tracking and chasing and sort of aggregating things. It gets provided by either tools that sort of come with these things automatically, though. I mean, for example, we in our 164

		environment you use a ticketing system to check our whole backlog and sort of the, the work you do, which is Jira. That tool I guess that's probably something you know of as a product. And this tool will, they, it sort of is not, I mean there is no manual effort required to check what's my delivery output for a certain sprint or cadence or even for a release. So I think a lot of this stuff, which probably earlier was done in a manual manually aggregated sort of excel or something comes out of the tool just on the click of a, of a button. And that definitely has, has given some ease there. I think other things I think generally I would say processes have been optimized and sort of reduced to the minimum required to as I perceived a certain management process as the little overhead heavy and the general not so not so streamlined as they are right now. So that I think also should have Helps to improve the efficiency.
Interviewer:	<u>20:48</u>	And so you talked about some tasks that gone not perhaps automated or easier to be done by the teams themselves without the support of the PMO. And what about other things that got relocated? That you mentioned that there was some that got relocated.
Respondent:	<u>21:16</u>	Yeah, I mean I would say sort of cases where maybe in the old world that you had a very heavy dependency management or risk management process that was supported by the PMO driven by the PMO team, which is more or less, captured on one side easier with the tools. And on the other side is something that our delivery teams take care of themselves. And there is no, I mean there's no need to have an extensive long-term dependency planning, but it gets broken down into shorter cycles that can be dealt with by the team directly. So I think it's a sort of works for these two examples. It's a push to either the delivery teams or the, in our case the product owners and it needs significantly less support from the PMO team.
Interviewer:	<u>22:20</u>	Would you say that it's better now that it's done by the delivery teams or it doesn't make a difference or was it better under the PMO, this risk management task?
Respondent:	<u>22:46</u>	I think it's better right now. I believe there is a high level of independence that you can achieve. And normally I think it makes sense that these stuff is with the people that actually do the work or the delivery. I, on the other side, believe there has to be some sort of a central aggregation or, or support too. So I think to a minor extent, it still is required but definitely not in the, in a sort of extensive way as it was probably done earlier. So it definitely, for me, dating you change for the better. It didn't completely go away, so there will be some support required but it's not, or some structure required, but it's not something that sort of monstrous. I think it was in the past probably.
Interviewer:	<u>23:40</u>	Would just say that this is only the results of an agile transition and automation or is this some kind of modernization on regulation as well? The reason I ask is because I imagined that banking is quite a regulated industry, right? And this risk management should be connected to needs of the regulator.
Respondent:	<u>24:19</u>	Yeah. I, yes, I mean that's absolutely right. I would say that, I mean for me to change is less that, that we don't do this part of process anymore. It's a lot more a part of our daily life and less a sort of at least perceived overhead process. I think in a classical project management for us is that there is often a risk management process, for example, applied that needs a lot of people and a lot of sort of central or like management effort to track things that will not be required or are differently tracked in a modern anti-liberal. And I think it's, it's typically what we, that you steal a do all these sort of processes that are done in the past. But I would say if you do them in a more relevant and more in a leaner way, I mean it doesn't mean that, that we don't have any risk management or sort of quality management, but it gets part of our sort of more daily business and regular discussions than a sort of separate on top of process that
Interviewer:	<u>26:02</u>	Right. So, when the tasks of the PMO got reallocated, they got incorporated into daily activities off the teams and perhaps became part of the culture of everyone.
Respondent:	<u>26:19</u>	Yes, I would say that. Perfectly.
Interviewer:	<u>26:25</u>	What other institutional changes happened along the transition to agile? Would you say that there were any other happening.

Respondent:	<u>26:41</u>	What do you mean to with institutional changes?
Interviewer:	<u>26:44</u>	Then for instance, you talked about new tools that they come with agile but also about some automation. So, automation, it could be a different institutional change, organizational change, but also changes in management, change in well in other parts of the structure, how IT departments are divided that kind of modifications.
Respondent:	<u>27:18</u>	I would say typically what we encounter stronger focus on having all the required skills allocated to the topic. I tried to release straight into the organization itself. So while we, for example, we're sourcing certain services from other teams within the firm in the past in the agile works we want to push for having all, we need to operate in our own sort of organization just to, to not be bound or to reduce dependencies and sort of coordination as much as we can. I think that's definitely one change. Another change is sort of this change from top down, planning to bottom up alignment. I would say in the past it was a lot on individual. For example, I would do a lot as a project manager to come up with a plan and tell the team what to do. And in the modern agile world, I would invest a lot in providing a foundation for the team to drive their own plan where they sort of were part of forming the plan and also commit to delivering the plan. So I think that's sort of would be two significant sort of changes, which I think also lead up pretty high in the sense that in an agile environment, I guess things are a lot more transparent, a lot more democratic in the sense of people get consulted early, they can bring in their concern or provide as sort of input in the steering where the journey goes.
Interviewer:	<u>29:05</u>	Perfect. That's clear. I would like to, I have two other tasks two other points in my interview and I would actually like to get your participation on this. One of them is about ranking a list of functions that PMOs are usually related to. This list has 36 functions and it's an excel file. I'm going to send to you and considering that we only have about 15 minutes still for this interview would you like to do it with me in the call, or would you like to do it in your own time and get back to me with it?
Respondent:	<u>29:59</u>	I can try to do it on the silent and I'll get back to you
Interviewer:	<u>30:02</u>	Alright. Alright. I'm going to send it to you right now. Just a second. Alright. It should be in your, in your email box soon. And well I could also start by asking the last question then, which is: is there anything I didn't ask you that you think is fundamental to understanding the PMO at the firm right now?
Respondent:	<u>31:20</u>	I think while we looked at PMO in the past, probably as a very administrative function. I think more than ever, the PMO benefits a lot from, at least in a sort of shallow or slightly distant way understands the content of what people do. Because it's just a the boundaries and the distance will shrink more and more and more. So I think we will have driven by automation or even by sort type of optimization, efficiency push, just we will have more and more proximity between team members, management and team leaders, and then sort of execution, the PMO and the whole team. And I think one of the key aspects of all this is that it's not just sufficient to know what yourself are doing or what your view, your own task is, but sort of to understand what's our overall mission, what's, what are the others doing? How does what I do impact the others? How can I help with my work to make their work better? So I think I would say that probably the general remark on sort of the agile theme. But particularly also relevant for the PMO. And, and I think that's where I would say PMO can add a lot of value if they not just provide their service, but understand how can they add value to the, agile release train, for example.
Interviewer:	<u>33:10</u>	So that's how you see to be a more going towards with the future.
Respondent:	<u>33:17</u>	Yes. I think that's, that's the way it will go. And that's the driving factor for success in the PMO space, I would say.
Interviewer:	<u>33:38</u>	Okay. did you get the email that I just sent to you?
Respondent:	<u>33:43</u>	Yes.
Interviewer:	<u>33:46</u>	Yes. So let me explain what you're looking at. 166

Respondent:	<u>33:51</u>	Actually, sorry.
Interviewer:	<u>34:06</u>	You got it?
Respondent:	<u>34:11</u>	No, I only, I didn't see anything.
Interviewer:	<u>34:18</u>	Should have been sent. That was three minutes ago. Maybe takes a little longer.
Respondent:	<u>34:28</u>	Maybe somewhere in Germany. I haven't, I can check, keep checking. I'll let you know once it comes.
Interviewer:	<u>34:37</u>	Alright. Well, but I'll give you some background on it that we talked previous, not today, but in our other call about the different roles that I proposed for the PMO, didn't we?
Speaker 3:	<u>34:53</u>	Yes.
Interviewer:	<u>34:54</u>	So the, there are four rows basic rows that the PMOs are usually associated with. That's the controlling role, which is related to measuring and reporting, the coordinating role, which is related to managing interdependencies and allocating resources. There's the servicing role, which is whenever a PMO has to perform a specialized task for another unit or perhaps external. And there's the supporting role, which is when the PMO creates the environment for teams to strive be that by mentoring training, coaching, those kinds of tasks. And in this, and the list that I sent you, there are 36 functions that literature usually refers the PMO to be either the main responsible or one of the main responsible. And what I like to do is to rank both before they are job transition. And right now from on a scale from one to five on how related is the PMO at the firm to those tasks. So five would be this is a core function of the PMO and one would be this is the thing that the PMO does but it's not really relevant. It's not really what they do. Perhaps it'll be automated someday. It's a thing in the scope and not really relevant. And perhaps there are functions that the PMO doesn't do at all. And for those there is a non-applicable field to be filled.
Interviewer:	<u>36:46</u>	Did you get the email ready?
Respondent:	<u>36:50</u>	Okay, got it. Yep. The email is still not here.
New Speaker:	<u>36:53</u>	Did I send to the wrong address. Can you receive a excel files in your email?
Respondent:	<u>37:01</u>	I think normally, yes. I at least got to two word files you sent me, so
Interviewer:	<u>37:04</u>	Yeah, exactly. So that's right. I thought it so it would be okay. Well whenever you get it's then use it to see. So as, as well as ranking from one to five. I like also for you to, to Mark Rich of those four roles. The PMO is up before me. Why are doing this functions.
Respondent:	<u>37:32</u>	Okay.
Interviewer:	<u>37:32</u>	Yes, that'd be great. Should I send it again? Maybe I should sent it again.
Respondent:	<u>37:40</u>	Yeah, I mean you could try. I still don't have anything with, I mean I guess in the worst case we'll see. Give it to me. Give it some time. But I guess the task is fairly understandable. Group the 36 into the four taggers and marked them from required to or not required to core activities. The before and after the transition. Right?
Interviewer:	<u>38:11</u>	Oh, you just sent it again just in case. Do you have a hard stop at 11?
Respondent:	<u>38:19</u>	[Say it again? Sorry.]
Interviewer:	<u>38:20</u>	Do you have a hard stop at 11.
Respondent:	<u>38:24</u>	Yeah. Yes. I need to move on.

Interviewer:	<u>38:28</u>	All right. All right. So perhaps that's it would be better for you to do this later or tomorrow and get back to me. Maybe?
Respondent:	<u>38:39</u>	Yes. I'll wait a bit for the attachment and then see if we can,. I hope it comes through eventually.
Interviewer:	<u>38:50</u>	Worst case scenario, I could get someone to bring it to you.
Respondent:	<u>39:03</u>	Not yet.
Respondent:	<u>39:06</u>	Nope. Still No, no, no. One more time. I got some other emails, internal ones but no
Interviewer:	<u>39:24</u>	It has left my outbox so it should be on its way.
Respondent:	<u>40:13</u>	Yeah. I still don't see any.
Respondent:	<u>40:18</u>	Yeah. Let's see. I mean maybe either it comes or if you can, if you want to send it to someone who maybe is able to print it for me and I can send it to you with this other sheet.
Interviewer:	<u>40:45</u>	Yes. Yes. I think that's the best way forward. I will stop recording this call right now then, and I'll see if I can get it to her. And, if you receive at any point, let me know as well.

H.3.2.2. Survey Responses

Group	ID	Function	Period	Value	Role
	1	Report project status to upper management	0: Traditional	5	CR
ing			1: Agile	3	CR
Monitoring and Controlling Project Performance	2	Monitoring and control of project performance	0: Traditional	3	СТ
Monitoring and Con Project Performance			1: Agile	4	СТ
and	3	Implement and operate a project information	0: Traditional	4	СТ
ing Perf		system	1: Agile	3	СТ
nitor ject	4	Develop and maintain a project scoreboard.	0: Traditional	4	СТ
Moi Proj			1: Agile	5	CR
Ħ	5	Develop and implement a standard methodology	0: Traditional	4	СТ
amer			1: Agile	2	SV
nage logie	6	Promote project management within the organization	0: Traditional	3	CT
Ma1 odo]			1: Agile	1	SV
Development of Project Management Competencies and Methodologies	7	Develop competency of personnel, including training	0: Traditional	3	SV
Pro nd N			1: Agile	2	SV
nt of es a	8	Provide mentoring for project managers	0: Traditional	2	СТ
enci			1: Agile	1	SV
elop	9	Provide a set of tools without an effort to	0: Traditional	3	СТ
Dev Con		standardize.	1: Agile	4	СТ
	10	Coordinate between projects	0: Traditional	3	SP
gem			1: Agile	3	SP
Multi-Project Management	11	Identify, select, and prioritize new projects	0: Traditional	2	SP
ct M			1: Agile	2	SP
roje	12	Manage one or more portfolios	0: Traditional	NA	
lti-P:			1: Agile	NA	
Mu	13	Manage one or more programs	0: Traditional	NA	

Group	ID	Function	Period	Value	Role
_	1		1: Agile	NA	
	14	Allocate resources between projects.	0: Traditional	3	СТ
			1: Agile	NA	
	15	Provide advice to upper management	0: Traditional	2	SV
			1: Agile	3	СТ
	16	Participate in strategic planning	0: Traditional	3	SV
			1: Agile	4	СТ
	17	Benefits management	0: Traditional	3	СТ
			1: Agile	4	СТ
	18	Network and provide environmental scanning.	0: Traditional	NA	
			1: Agile	NA	
	19	Monitor and control the performance of the PMO	0: Traditional	NA	
			1: Agile	NA	
	20	Manage archives of project documentation	0: Traditional	3	СТ
			1: Agile	1	SP
ant	21	Conduct post-project reviews	0: Traditional	4	СТ
jeme			1: Agile	1	SP
Strategic Management	22	Conduct project audits	0: Traditional	NA	
c M			1: Agile	NA	
itegi	23	Implement and manage a database of lessons learned	0: Traditional	3	CT
Stra			1: Agile	2	SP
	24	Implement and manage a risk database.	0: Traditional	4	СТ
			1: Agile	2	SP
	25	Execute Specialized Tasks for Project Managers	0: Traditional	4	SP
			1: Agile	3	SP
	26	Manage customer interfaces	0: Traditional	2	SP
			1: Agile	2	SP
	27	Recruit, Select, Evaluate, and Determine Salaries for Project Managers	0: Traditional	NA	
			1: Agile	NA	
	28	Project administrative support	0: Traditional	4	SP
			1: Agile	4	SP
	29	Work-family equilibrium	0: Traditional	NA	
	20		1: Agile	NA	
	30	Developing the change management database	0: Traditional	3	SP
	21		1: Agile	3	SP
	31	Portfolio problem solving	0: Traditional	3	SP
	22		1: Agile	3	SP
	32	Cost/benefit analysis of projects	0: Traditional	3	СТ
	33	Pisk management	1: Agile 0: Traditional	4	СТ
	33	Risk management		4	СТ
	34	Project/program delivery management	1: Agile 0: Traditional	2	SV
	34	1 rojeco program denvery management		1	SV
	35	Draigat management has shere while -	1: Agile 0: Traditional	1	SV
Other	33	Project management benchmarking		3	СТ
õ			1: Agile	4	СТ

Group	ID	Function	Period	Value	Role
	36	Managing stakeholders	0: Traditional	2	СТ
			1: Agile	2	СТ

H.4 Case D H.4.1. Interview with Consultant 1 H.4.1.1. Transcripts

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Interviewer:	<u>00:00</u>	Now we're being recorded. I'd like to start with some demographic questions. I like to call them demographic questions. In which sector does this firm works in?
Respondent:	<u>00:11</u>	It's a retail sector. It's one of the biggest retailers in the Netherlands.
Interviewer:	<u>00:18</u>	Would you say that roughly how many employees they have?
Respondent:	<u>00:21</u>	Top of my head, they have globally over 200,000 employees, but it's globally. In the Netherlands, not be able to guess. They have over a thousand stores. I'm not sure the total amount of employees in the Netherlands.
Interviewer:	<u>00:46</u>	How many teams would you say work with some agile methodology?
Respondent:	<u>00:52</u>	So it's, yeah, it's good to understand little bit on how the company is structured. So basically they have to say the least they have five silos within IT. And, and one silo is a little bit separate. And I think they are totally working agile with I think over 10 or 15 teams there when I was there. So, also good to know, I was there half a year ago and I've been there for two and a half years. And in the first one and a half years they were working traditional waterfall and then slowly progressing you saw more and more agile teams popping up. And then at some point they thought there are now so many teams working together. It was more efficient if everyone was working agile instead of one project was waterfall and the other project was agile and then timelines didn't match up. So they transitioned into the SAFe framework total working agile. So I was there during that transition and I was working as a scrum master of one team. That was working in SAFe environment, was one of the front runners within the company going there and there we were part of a project with eight or nine teams.
Interviewer:	<u>02:27</u>	All right. Right.
Respondent:	<u>02:29</u>	And the other. So, basically, I was ScrumMaster of two teams. So one team was part of a lot larger program, so eight or nine teams and the other one was part of a department that was completely going agile. And that was about It fluctuated a bit, but also about eight, nine teams.
Interviewer:	<u>02:54</u>	Well you mentioned that a few agile teams started popping up before they decided to go fully agile. So would you say that this decision was at the end of the day you bottom up to go agile?
Respondent:	<u>03:11</u>	I think so, but it's also stimulated by management to experiment with it. So, I think, when there was a new project start where they knew it was going to be a long project with a typical or specific focus, they said: "Oh, maybe you should start with an agile team and go from there." Or when there is one product specific particular, software product that is, that they do some small projects on, they start making that an agile team so they can build on that. Basically they had some software products, applications where there was constantly requests there "Ok can you add this new field? Can you do this, can you do that?" And instead of starting up a new project for that or RFC request for change, every time, they 170

		say: "okay, let's make that team that's working dedicated on that a scrum team." And then working at request, making a backlog start working agile. And for those things, it was quite logical to make that step 'cause it was more efficient. But yeah. Yeah, other teams. Yeah. I think it went into kind of way. So they were looking at what are logical candidates to start working agile? And that's, I think how it started up.
Interviewer:	<u>04:38</u>	Interesting. And what would you say was your relationship as the scrum master with the PMO?
Respondent:	<u>04:44</u>	So in my first year there I was part of the traditional PMO team. And my relationship as a scrum master with PMO was actually very small, so there was not a lot of contact between me and the PMO during my time as acrum master.
Interviewer:	<u>05:07</u>	When that was was related to which functions?
Respondent:	<u>05:12</u>	They asked about reporting. It was one of the main topics that they have. So they implemented JIRA as well. But while implementing that there wasn't really a way to get the data out and how to make reports on what to do with it. So they came asking me what's the status or what, how was the team doing or how can I get some information? Cause, well more and more teams were starting to work agile. There were still a traditional PMO office that was still trying to do their normal reports as they were doing while there were working waterfall. And that causes some cause it's not always the same on Also with the different tools in place. The PMO struggled with that some times.
Interviewer:	<u>06:10</u>	Alright. Alright. Comparing your period as the PMO there in a traditional sense and the period as a scrum master. Would you say that there are tasks that the PMO before used to do that got the redistributed to scrum teams, scrum masters, other roles in the organization?
Respondent:	<u>06:32</u>	So I can first expand a bit in what we were doing with the traditional PMO. So in a waterfall project our PMO was mainly financially focused. So what is the spending of the project and if we have these people working in a project, if we forecast them towards the end of the project, are we going to stay within budget, overrun. So which we typically saw, we have a project manager and a PMO. And the PMO had a weekly meeting with the project managers saying: "Oh, these hours have been booked on your project. These are the costs and if we're going to continue this line, you either go above your budget or below your budget." And that was basically the main focus of the PMO there I'd say. So, to make sure that it's financially okay. And then if the PMO and project manager, were working a little bit longer together or when there was additional help needed from the PMO for the project manager, then they would take up additional tasks or additional roles.
Respondent:	<u>07:35</u>	So some people were working on a risk log, seeing what kind of risk are in a project? And maintaining that [list] and attending those and risk meeting. And some people become more towards the change management and communication and everything around it. So what's the changes that need to be communicated to the organisation or bringing out newsletters, all kinds of supporting tasks for people, expanding their roles more and more to see what is needed. When you were working with the scrum teams And also important of the traditional part is working on invoices, a company as a lot of external suppliers and all the supplier sent invoices every month and then you need to match with the hours booked and there was a whole process around it and which is quite complex and not the most inspiring work to do.
Interviewer:	<u>08:35</u>	In an auditing sense?
Respondent:	<u>08:36</u>	Yes. Yeah, yeah. Sort of. Yeah. Or controlling more I guess. You have to check the invoice is correct. Then if not you have all the discussions. So when we were going to scrum part, then you will see budgeting wise and financing wise you have a fixed team. So you can forecast that basically for the whole year. And in theory that wouldn't change that much. So the forecasting for financial part was, I guess, getting easier because basically at the beginning of the year the funding was there for a whole year. For a team of X amount of people, seven or eight. Depending on how big the team is and then you know what the cost at the end of the year is. Of course people take holiday and people go but then replaced them with new people. Also holidays can be accounted for. So financial part will be a little

		bit easier. So that's I think the amount of effort declined there for the PMO. And I also think at the high point we had over 25 people in the PMO team or something like that. And at the moment when I left, I think they were doing it with six, seven, eight people. Basically one person in every silo while at the beginning it was multiple people. At some point there were seven people working in one silo. So less people because it makes some parts easier I guess.
Interviewer:	<u>10:21</u>	Did they try to merge the silos in someway?
Respondent:	<u>10:27</u>	No, not as far as I know. So, those are different domains. You have, for instance, you have an online domain where they all focused on the website, the online sales channel. You have a marketing and communications domain where they focus on how does the store look like, what is being done in the store, all related IT applications of course. And then you had a supply chain domain where they did all the Everything around the trucks and filling up the warehouses and making sure that there is enough stock in the stores. There was a big program around that as well. So there's definitely specific focus and focus point in that. And there were no ideas to bring that to one big pile of people.
Interviewer:	<u>11:25</u>	And did these silos or the
Respondent:	<u>11:30</u>	Domains. I think that domains is a better word for it?
Interviewer:	<u>11:32</u>	Domains have independent PMOs?
Respondent:	<u>11:36</u>	Yes. They have independent PMOs but there isn't So, basically there's a central PMO department which has basically a bucket of people, 20 people for instance. And within the domains or the pillars, they ask for: "Hey, I need four people PMO because I have 20 projects." So then four people were allocated to that and domain. Because there was a central function, there was also a central way of working. So the 20 people, the PMO came together on a weekly basis or and discussed,: "okay, how are you handling this or how are you doing that?" It was also a small sort of center of excellence where they provided guidelines, tooling that kind of stuff, ideas on how to work, processes, reporting, guidelines.
Interviewer:	<u>12:40</u>	Okay. Did this procedure change with agile?
Respondent:	<u>12:46</u>	Yes, I think so. So usually there was Also, the PMO had a strong financial focus as I said earlier and it's also they were maintaining the budget basically of IT. Seeing if it all stayed within budget or didit went over budget. And I think around the time that I left there, they dismantled that central point and gave every domain or every pilar their own dedicated PMO that was probably responsible for the financials of that part. So, it was broken down. So that sort of central role for finance responsibility was gone with that, i'd say. Other roles. I think there still is a central role for tooling. So there's still somebody in charge of some central tooling that they use tools. Project management tools, agile tools. And that is still in place.
Respondent:	<u>14:00</u>	Alright. Alright. Is there anything that it's a new task that they acquired?
Respondent:	<u>14:17</u>	I don't know if it's totally new task, but it's definitely a change of task. Or the way that they did it before is changed on how they're doing it now. And that's for instance for reporting they were used to. So, before that, as in waterfall, in every month you have to, as a project manager, update some status reports and the status reports were all combined together into one big report that was given to the CIO saying this is how the projects are doing. And, and that changed with agile because then there's, I think the reports were coming out of JIRA, a different tool, where they I think from a PMO perspective. They were doing an extraction of all the data. They were struggling on how to find the right way on seeing how the project was doing.
Respondent:	<u>15:11</u>	So they were doing something half automated stuff, a lot of manual work on see on how things are doing. Some And also some scrum teams were using JIRA in different ways. There was not one central way of reporting and comparing team or that kind of stuff. I think it was more the earlier phases or low level of maturity of those teams.

Respondent:	<u>15:43</u>	And there wasn't really a central point that said: "okay, this is how we're going to use JIRA. This is how you have to to it now." Everybody was a little bit like pioneering their own way. And thinking of how this works. Or they were hiring externals and they're having a different way of working, implementing that in their team. And so there was a little bit of different ways of working starting there. I don't know how it has evolved this last half year. But
Interviewer:	<u>16:15</u>	This description that you're giving now is at the end of your period there half a year ago?
Respondent:	<u>16:19</u>	Yeah. So, I think they implemented JIRA as a tool probably Looking back, maybe a year ago. So, I've seen six months of those that year. And in that six months, well first they introduced it and there were some, some people working on it and then people find their own way. New people were hired. They didn't know about the old process. People starting their own templates and there was a little bit of It was getting out of the normal way of working. I would say. There was not a central point that says: "okay, this is how we're going to do it. Were there is good vision. So that it would be used for reporting. So that's where later on there were more problems with, okay, how do we get the data out and how to portraits are doing. Yes. To get an out of the tools cause everything is different. You can compare, you can. So for also for, if you have to look at 50 scrum team and how they were doing it and everyone's reporting differently and or not according to the same standards, the challenge. So I don't know if they're doing it now, but I'm assuming that there was a big
Interviewer:	<u>17:37</u>	Would you think that there's a big change in six months?
Respondent:	<u>17:39</u>	I think so, yeah. Yeah. Yeah. If I see what we did in the first six or a Monday, scaled up more, I think the in there, I think there's an exchange I'm shooting. And why? Because I think the first steps in maturity are the, yeah. Where are you seeing the biggest change? Yes, I'm showing that there was a big change. So probably all departments are now working in a channel, I guess.
Interviewer:	<u>18:14</u>	Did they have funds expanding this from only it to other sectors of the business?
Respondent:	<u>18:21</u>	I think the business, yeah, the ambition is, or was there at least. So when I was there, they also created what they called an agile backpack. Basically a hundred slide deck with the agile and how, how it works and why it's interesting for the business. But the latest thing I see is that there, for instance, the role as product owner traditionally comes [inaudible] Ideally comes from the business. But within that company you see it most of the time coming from IT. So IT is the product owner. So he's traditionally you have the business analysts for instance, that they are the bridge between IT and the business where they translate the requirements from the business towards IT solutions. And now you sort of see that the business, ask for what they want and then make their backlog from there. But it's not, most of the times it's not someone from the business that are the product owner of the team. So that's something that you still see. So, but I think the ambition is there to go toward full business agility, or that kind of way. Yeah. But that is, I think, that's a long term transition.
Interviewer:	<u>19:45</u>	What other transformations happen in the firm along with the agile transformation? Would you say that there are any other that could influence the ways of working this scene?
Respondent:	<u>20:05</u>	Okay. Well, within retail I think competition is high. They see that also not only in the Netherlands, but also abroad, that there's, you have, Amazon for instance, is a really big competitor and they see the speed that they're making. It's a threat to them. So they then they feel the urge that they need to change something and that the old way of working is not gonna cut it anymore. So if there are external influencers that I think push them to go faster and to change faster and to go with them to jump on the agile wagon, I guess. And other influencers, can you repeat the question again?
Interviewer:	<u>21:06</u>	For instance, was there any other management change, an automation drive into some functions?

Respondent:	<u>21:19</u>	Not as far as I know. Which I thing management was the same way. We did get a new CEO who was a little bit more tech minded I guess, but No, I think most of the, the biggest part was the exterior. To see what the market does. And so really it's a high competitive market where you feel the urge on changing aims, staying on top of the market, basically. Stay or remain the market leader I guess.
Interviewer:	<u>22:00</u>	Let's see. And would you characterize this distribution of tasks that we mentioned earlier, decentralizing financial responsibilities Well fixing the teams, and mainly in finances that you mentioned there was the biggest change, but would you describe these ones that you mentioned as a pain or a benefit? And further if you recall, anyone that you didn't, any single function that you didn't mention also as a pain or benefit.
Respondent:	<u>22:37</u>	And pain or benefits for who?
Interviewer:	<u>22:39</u>	For the firm. So you could take the lenses of the employees. You could take the lessons of competitivity.
Respondent:	<u>22:47</u>	Yeah. Let's see. Gotta think about that one. Okay.
Respondent:	<u>23:04</u>	So I think in while in transition and you saw quite some troubles with projects with working together with scrum teams or actually more scrum teams working with projects. And that has to do basically with planning. And so projects plans their project for a longer period of time. I can give you an example. I was scrum master of an integration team and what we did is they have a new data warehouse that they're gonna put from traditional servers into the cloud. And what we basically did is we connected several IT systems to that cloud so we can bring all the data together so we can do cool data analytics and reports out of it. And that they can do smart stuff and make decisions based on data. But we as a scrum team, we wanted it to, our highest priority was a source.
Respondent:	<u>24:14</u>	I know which one exactly it was, but let's say weather data, right? So the company wanted to have weather data so they can better forecast it the amount of ice creams that they need to have in the stores, for example. So the one at a time was something that we wanted to integrate. But what happens, there was another project and it was also working on that same source of weather data and they were doing on enhancements in that project. And that project was going to go live in six months and in those six months we are not allowed to touch it because if we change stuff then.
Interviewer:	<u>24:49</u>	It affects their planning.
Respondent:	<u>24:49</u>	Yes. So there was a lot of going back and forth. And so whenever we are, we going live and then the project delayed. So eventually we put it lower on our backlog because we weren't able to touch it or use it or work on it. And that If you have multiple agile team working together, you can easier align or bring priority closer to each other so you can work on, it's faster I would say. So it is an example of a waterfall project with our planning long term conflicting with agile teams that are wanting to use it earlier.
Respondent:	<u>25:37</u>	But, the good thing is then you have the flexibility of putting it lower on the backlog, but it is the item with the highest value. So, you ideally want to work on it. So you saw more and more that they were bumping into each other and not happy with it and the way they were working together. So that's one of the challenges, but that's not specifically for PMO, but it's more of the agile for the waterfall, working a hybrid version and or transition. And looking at PMO, I think it was harder for PMO at some point to get data on how projects were doing. And they were still demanding from agile teams to report on a monthly basis. But agile teams were saying, if you wanna know how we're doing take a look at JIRA. And, we're not going to build an extra report because You know We would rather put our energy in development. So. [crosstalk]
Interviewer:	<u>26:40</u>	But then, did they have a reason why they needed it?
Respondent:	<u>26:45</u>	Yes, it is. That's because I think the management wasn't fully thinking agile yet. So they still, they said, fine working agile, but I want my reports every month because I want to know how we're doing. I want to steer on that. And I think that's one of the traditional 174

		pitfalls, I guess for implementing agile. So there's was definitely one what you could see there. So they wanted it but
Interviewer:	<u>27:14</u>	Alright. I think I have one activity and one last question. And this activity usually takes a while. It is not the clearest thing to do, but it's the best design I came up with yet. So I have a very extensive list right here with 36 functions. That literature usually associates with the PMO, right? And I also have a scale and a list of roles. The list of roles is very interesting, it stands for this [hands over the sheet to the participant].
Respondent:	<u>27:58</u>	Okay. Yes. That helps.
Interviewer:	<u>28:01</u>	Well, when I was trying to come up with what is the role, because the role has many different descriptions. There is a formal role in a job description there is the role of a person when they share responsibility on a task or function. That is when you usually say someone has a role to play during this. They share responsibility. Well there are different ways Sometimes it's the role is a function. Sometimes the role was a task. And I tried to wrap my head around this and make a glossary, if you will, of what is a role a in a parallel with performing arts. For instance, if you have a story and it's very simple story, you have a main character and supporting characters. The supporting characters have supporting roles in which they are decisions influence the environment in which the main character is in at different points in the story. And the main character has a leading role. Leading the, sorry to the end. That's a very simple story. When the story gets more complex you have different characters assuming leading in supporting roles in different points of the salary. Till gets complex enough that it couldn't tell if there was a main character or not.
Interviewer:	<u>29:24</u>	The firm for me is a very complex character. So complex that you don't have a leading and a supporting role. You have different kinds of roles. Right here we have four roles that are usually associated with the PMO. These are coordinating, which is when the PMO is allocating resources and managing complexities in inter-relations between projects and portfolios and Managing dependencies that's the word. You have a controlling role, which is more related to, I didn't give you one, sorry. A controlling role, which is related to measuring and reporting. I do have a supporting role, which is related to building the environment for the teams to perform. So this is leading, training, tooling, standardizing. And you have a servicing role, which is when the PMO provides service to someone internal or external in a very specific ways, a specialize function that they perform. So for instance, they might be the only department in the firm capable of running a cost benefit analysis. So there'll be a task that you require them to do and then they have a servicing role.
Respondent:	<u>30:50</u>	Okay. Yes.
Interviewer:	<u>30:52</u>	And you have your own names for this?
Respondent:	<u>30:55</u>	Yeah, I'm just translating into Yes.
Interviewer:	<u>30:57</u>	Okay. This is interesting to see.
Respondent:	<u>30:59</u>	I just Yeah, it's just, just when I look at this and I was like, okay, so basically there is the part where you're managing dependencies, you have some reporting part, you have some more like support helping out, leading training, tooling, and then you have serving role with some specialities. That's basically what I wrote next to it.
Interviewer:	<u>31:20</u>	Yes. Perfect. And what I would like to do is check each of these functions both before transition and after transition and grade them from one to five. Being five, this is the thing that the PMO will really did. I took most of the time, it was really important. And one being the least important, not really related to it. And if it's completely non-applicable there is the NA, not applicable. They never actually did it. It was never part of the scope. Nobody ever thought about them doing it. And as well, which role did they play while doing this. Before and after. And I'll be here in case you have any questions on the names clear. Thank you.
Respondent:	<u>32:12</u>	Will you keep recording in this time?

Interviewer:	<u>32:13</u>	I do because if you have any questions it's good to clear out. And sometimes you have comments on it it's insightful.
Respondent:	<u>32:26</u>	This was really important and it wasn't [inaudible] [inaudible]
Respondent:	<u>33:33</u>	So here we go. Question two. So monitoring control of project performance. I think for the PMO, it was still important, but from project perspective, less important. So
Interviewer:	<u>33:46</u>	The project didn't the need monitoring and controlling, but the PMO still did it anyway and it was fairly important to their tasks. Is this what you mean?
Respondent:	<u>33:57</u>	Yes. I think for the PMO is still important because it's directs to question one, so status of the, of how we're doing but for the project it was less important because the product owner knows what's going on in your team. So he knows on a biweekly basis or a daily basis, if he wants to know, he can always look in JIRA to see what's the status. But for PMO, because they need to get this information, it's still important. And I'm translating it's correct. Yes.
Respondent:	<u>35:08</u>	Yeah, it isn't interesting. What do you mean with a project scoreboard.
Interviewer:	<u>35:32</u>	It's a few and basically the same as the previous ones, but a easy way to check how is the burnout chart, how's
Respondent:	<u>35:44</u>	Okay. Yeah.
Interviewer:	<u>35:46</u>	Are we performing, how are the projects
Respondent:	<u>36:34</u>	Is interesting. I noticed that they actually a lot of The controlling role on the traditional part was often there.
Interviewer:	<u>36:48</u>	That's one trend I might observe when I'm analyzing the data.
Respondent:	<u>36:52</u>	Yeah. So, but that's also the way it's, so the way it was implemented here, you saw that. If you look at the theory of a PMO, then it should be more helping the project managers helping them with tooling and with standard and processes. But what we saw at this company is that the PMO was there more to control. So they more and more of a police role to see if, well, everything was according to the standards instead of helping. At least that's how it felt for me. That's interesting. So you see the control role was a big one actually.
Respondent:	<u>37:43</u>	So a standard methodology, I think it was still important than for the PMO, but it was done less good I'd say.
Respondent:	<u>38:10</u>	With project management, you also mean agile way of working for instance.
Interviewer:	<u>38:16</u>	Yes.
Respondent:	<u>38:18</u>	And then within the organisation, you mean also outside of IT? Like the whole organisation.
Interviewer:	<u>38:23</u>	yes.
Respondent:	<u>38:23</u>	Okay. So in the beginning it was
Respondent:	<u>39:15</u>	So what'd you saw before, to give a little voice over, is when we're working waterfall, basically IT was one big black box for the rest of the organization. So there was, every part of the organization outside of IT had their own contact person within IT and where they put their requests and then that's their front desk for all their IT questions. And everything that happens behind it was one of the big black box for the rest of the organization. With the introduction of working in an agile way, they were involving the business more and more, inviting them to product demos and release demos. So the involvement of the business and stakeholders there were more important. And that's where there also was a more of a focus

		on sharing and [inaudible]. So, "How was IT working and how can you participate or how can you work with us?"
Respondent:	<u>45:21</u>	I'm getting the hang of it. I'm going a little bit faster.
Respondent:	<u>45:42</u>	So how would you determine strategic planning?
Interviewer:	<u>45:45</u>	What do you mean?
Respondent:	<u>45:46</u>	So participate in strategic planning. So for traditional PMO I would say reporting to C- level. So think thinking had just roadmaps. But for in a safe way of working, do you mean it in like a PI planning or still same to C level.
Interviewer:	<u>46:10</u>	Same to C level. That's more a long term.
Respondent:	<u>46:13</u>	Okay.
Interviewer:	<u>46:16</u>	Market-facing. Translating mission vision into operational aspects.
Respondent:	<u>46:44</u>	Interesting. Benefits management, I don't think they were even tracking it. Interesting. And a lot of benefits were being promised when writing the project initiation documents but tracking at the end, not so much. Definitely not better. There were some financial departments there.
Interviewer:	<u>48:38</u>	That's interesting.
Respondent:	<u>48:40</u>	Yeah. Lessons learned. So every project, in their project end reports, they had to have a part of lessons learned in there. And all those projects and reports are just pilled up in one system and nobody ever looked at it. But I think so PMO, was helping to make sure is that all in there and they manage that system where all lessons learned were stored. But within agile I have a My experiences that the PMO because there were less people there were focused less on details and they were a little bit more high level and lessons learned within agile is more within the team you see most of the time and. Or at least there. And there you didn't saw like a central lay square store and lessons learned to make sure that the other teams were learning from it. So there you could see it was not applicable actually.
Interviewer:	<u>49:46</u>	So one of those cases of redistributing tasks.
Respondent:	<u>49:51</u>	Yup. Yes. Yeah, I think so. Yeah.
Respondent:	<u>50:28</u>	What do you mean with the managing customer interfaces? Does this has to do with tooling that you as a PMO have and that's your customer? Is it the project managers or the wider community can use it or?
Interviewer:	<u>50:45</u>	It could be internal or external customers and it could be tooling, could be arranging meetings, it could be a interfacing, managing the communication. [Inaudible]
Respondent:	<u>51:17</u>	This would have been fun
Respondent:	<u>52:14</u>	And work family equilibrium. What do you mean with it?
Interviewer:	<u>52:20</u>	It's work life balance. It's just a different way to say.
Respondent:	<u>52:59</u>	A big difference when you notice with answering these questions is that before you know, in waterfall, the PMO was part of the project. Was therefore more involved in everything that's going on with the project. While within agile the PMO was not of the team, so was standing further away from the team or even from teams. Sometimes there's definitely a change in the role because when you're part of the project you go into more details I guess

at this client. And if you were further away, you go into less details. That definitely changed your role. It's interesting.

Respondent:	<u>53:41</u>	Portfolio problem solving.
Interviewer:	<u>56:22</u>	I think that's it fantastic.
Interviewer:	<u>56:26</u>	Taking care of your time. I have the last question then, and it's, is there anything I didn't ask you that you think is fundamental for understanding the PMO?
Respondent:	<u>56:48</u>	No, I'm, no, I think it's been said but it's really important that that the PMO there really had a financial focus so it was really on financials and reporting and metrics. So this was one of the biggest focus points there. So it is good to have that in the back of your mind. Other than that
Respondent:	<u>57:14</u>	I don't think so. And if you've got more questions then feel free to reach out or if you after transcribing you still have some questions because maybe I didn't give voice to clearer answer or what I noticed for myself sometimes when I was transcribing it, when you write down it's like that's not really an answer on the question that I asked. Cause then people, people just start talking and then, I dunno what the question was anymore, but I think this was the answer. Yeah. Sometimes it's totally different than what the question actually was. So if you find out then let me know and I'm more than happy to help that. Let's give you the right answer.
Interviewer:	<u>57:52</u>	anyways, as soon as I have this transcribed, I'll send it back to you so you can revise it and see if I did any of these conceptions.

H.4.1.2. Survey Responses

Group	ID	Function	Period	Value	Role
	1	Report project status to upper management	0: Traditional	5	СТ
ing			1: Agile	4	СТ
Monitoring and Controlling Project Performance	2	Monitoring and control of project performance	0: Traditional	5	СТ
Monitoring and Con Project Performance			1: Agile	5	СТ
and	3	Implement and operate a project information	0: Traditional	5	СТ
Perf		system	1: Agile	2	SP
nitor ect]	4	Develop and maintain a project scoreboard.	0: Traditional	5	СТ
Moi Proj			1: Agile	5	SP
t	5	Develop and implement a standard methodology	0: Traditional	5	СТ
men	Development of Project Management Competencies and Methodologies 6 8 2 9 9		1: Agile	4	СТ
nage logic		Promote project management within the	0: Traditional	1	CR
Maı odo]		organization	1: Agile	4	SP
ject Aeth	7	Develop competency of personnel, including	0: Traditional	3	СТ
Pro nd N	Pro nd N	training	1: Agile	4	SP
nt of es a	8	Provide mentoring for project managers	0: Traditional	5	СТ
enci			1: Agile	5	SP
elop npet	9	Provide a set of tools without an effort to	0: Traditional	2	СТ
Dev Con		standardize.	1: Agile	3	SP
t t	10	Coordinate between projects	0: Traditional	2	CR
Multi-Project Management			1: Agile	0	NA
lti-P	11	Identify, select, and prioritize new projects	0: Traditional	0	NA
Mu) Mar			1: Agile	0	NA

ID	Function	Period	Value	Role
12	Manage one or more portfolios	0: Traditional	5	СТ
		1: Agile	-	СТ
13	Manage one or more programs	0: Traditional		СТ
		1: Agile		СТ
14	Allocate resources between projects.	0: Traditional		CR
		1: Agile		CR
15	Provide advice to upper management	-	-	
				CR CR
16	Participate in strategic planning	Ű		
				SV
17	Benefits management	-		SV
1,	Denema management			NA
18	Network and provide environmental scanning	-		NA
10	Network and provide environmental scanning.		-	NA
10	Manitar and control the performance of the PMO	e e		NA
19	Monitor and control the performance of the PMO	-	3	СТ
20		-	3	СТ
20	Manage archives of project documentation		5	СТ
	<u>a</u> 1	-	0	NA
21	Conduct post-project reviews		0	NA
		-	0	NA
22	Conduct project audits		0	NA
		-	0	NA
23			2	SP
		-	0	NA
24	Implement and manage a risk database.		3	СТ
		1: Agile	0	NA
25	Execute Specialized Tasks for Project Managers	0: Traditional	4	SP; SV
		1: Agile	0	NA
26	Manage customer interfaces	0: Traditional	2	SP
		1: Agile	0	NA
	Recruit, Select, Evaluate, and Determine Salaries	0: Traditional	0	NA
	for Project Managers	1: Agile	0	NA
28	Project administrative support	0: Traditional		SP
		1: Agile		SV
29	Work-family equilibrium	0: Traditional	0	NA
		1: Agile	0	NA
30	Developing the change management database	0: Traditional		СТ
		1: Agile		NA
31	Portfolio problem solving	0: Traditional		SP; SV
		1: Agile		SP; SV
32	Cost/benefit analysis of projects	0: Traditional		NA
		1: Agile		NA
33	Risk management	0: Traditional	4	CT
			4	
		1: Agile	2	CT
	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	12 Manage one or more portfolios 13 Manage one or more programs 14 Allocate resources between projects. 15 Provide advice to upper management 16 Participate in strategic planning 17 Benefits management 18 Network and provide environmental scanning. 19 Monitor and control the performance of the PMO 20 Manage archives of project documentation 21 Conduct post-project reviews 22 Conduct project audits 23 Implement and manage a database of lessons learned 24 Implement and manage a risk database. 25 Execute Specialized Tasks for Project Managers 26 Manage customer interfaces 27 Recruit, Select, Evaluate, and Determine Salaries for Project Managers 28 Project administrative support 29 Work-family equilibrium 30 Developing the change management database 31 Portfolio problem solving 32 Cost/benefit analysis of projects	12 Manage one or more portfolios 0: Traditional 13 Manage one or more programs 0: Traditional 14 Allocate resources between projects. 0: Traditional 15 Provide advice to upper management 0: Traditional 16 Participate in strategic planning 0: Traditional 17 Benefits management 0: Traditional 18 Network and provide environmental scanning. 0: Traditional 11: Agile 0: Traditional 1: Agile 19 Monitor and control the performance of the PMO 0: Traditional 11: Agile 1: Agile 1: Agile 20 Manage archives of project documentation 0: Traditional 1: Agile 1: Agile 1: Agile 21 Conduct post-project reviews 0: Traditional 1: Agile 1: Agile 1: Agile 22 Conduct post-project reviews 0: Traditional 1: Agile 1: Agile 1: Agile 23 Implement and manage a tisk database. 0: Traditional 1: Agile 1: Agile 1: Agile 24 Implement and manage a risk database.	12Manage one or more portfolios0: Traditional513Manage one or more programs0: Traditional514Allocate resources between projects.0: Traditional514Allocate resources between projects.0: Traditional515Provide advice to upper management0: Traditional516Participate in strategic planning0: Traditional317Benefits management0: Traditional018Network and provide environmental scanning.0: Traditional019Monitor and control the performance of the PMO0: Traditional320Manage archives of project documentation0: Traditional514Agile01: Agile021Conduct post-project reviews0: Traditional522Conduct project audits0: Traditional023Implement and manage a risk database.0: Traditional224Implement and manage a risk database.0: Traditional225Execute Specialized Tasks for Project Managers0: Traditional226Manage customer interfaces0: Traditional027Recruit, Select, Evaluate, and Determine Salaries for Project daministrative support0: Traditional229Work-family equilibrium0: Traditional21: Agile031Portfolio problem solving0: Traditional41: Agile032Cost/benefit analysis of projects <t< td=""></t<>

Group	ID	Function	Period	Value	Role
			1: Agile	1	SV
	35	Project management benchmarking	0: Traditional	0	NA
			1: Agile	1	СТ
	36	Managing stakeholders	0: Traditional	4	SV
			1: Agile	1	СТ

H.4.2. Interview with Consultant 2 H.4.2.1. Transcripts

Date: 23/08/2019

Time: from 14:00 until 15:00 (UTC+01:00) Location: Respondent's office. Recording: Windows 10 Recorder and Android recorder. Interviewer: Henrique Cleto Carneiro

Interviewer:	<u>00:00</u>	Okay. So from this moment on we're being recorded. And just for a statement, you are fine with this being recorded?
Respondent:	<u>00:07</u>	Yes.
Respondent:	<u>00:08</u>	Perfect.
Interviewer:	<u>00:11</u>	I would like to start with just some demographic questions as I like to call them. How many people would you say work in this the client?
Respondent:	<u>00:22</u>	Correct. Like the total firm, right?
Interviewer:	<u>00:25</u>	Yes, ballpark notion.
Respondent:	<u>00:29</u>	No idea. 20,000.
Interviewer:	<u>00:37</u>	How many agile teams are there?
Respondent:	<u>00:45</u>	Okay, so in the area where I worked personally, there were up to about 20 agile teams, but I'm sure there's more in the wider scope of the company, but I have no idea.
Respondent:	<u>01:00</u>	All right. All right. 20+. And how many people in each of these teams on average?
Respondent:	<u>01:07</u>	About eight. About eight.
Respondent:	<u>01:10</u>	Which agile methodologies did they use back then?
Respondent:	<u>01:16</u>	It was mostly scrum and they were also adopting or using elements of LeSS as a scaling framework.
Respondent:	<u>01:27</u>	Yeah, that's it
Interviewer:	<u>01:28</u>	All right. So scrum and LeSS just because They were scaling up?
Respondent:	<u>01:33</u>	Yep.
Interviewer:	<u>01:34</u>	Alright. Okay, let's dive into more specific questions for the research. How would you describe your own role in the project?

Respondent:	<u>01:43</u>	I had a PMO role supporting financial controlling role, doing all the financials for the whole program and reporting out to that. Then supporting to the agile teams that could be in, from a sort of PMO perspective, that could be in tooling that was in access to tooling or some configuration in Jira. Some report-outs from JIRA. Other PMO activities in the domain of status reporting towards the like holding company or towards the PMO office, to the portfolio office at the company. Also doing report outs to the management team cause I was working for a program or within the online eCommerce domain. Other activities. Yeah, I think that's the core of it. I mentioned things like onboarding and stuff. Right.
Interviewer:	<u>03:18</u>	And it wasn't part of my core role as a PMO, but I also did some project management activities for, you know other, other projects that weren't picked up by the dedicated scrum teams. So sometimes there's more of a project coordination, project management role for deliveries that we were doing with primarily external suppliers, you know, external developers that weren't part of this core of those 20 or so scrum teams. Maybe sometimes there would be some involvement from them.
Interviewer:	<u>04:06</u>	Why would you say it's not part of the, of the scope of the PMO there?
Respondent:	<u>04:13</u>	I would say as I said that because from the PMO perspective there were specific expected and agreed upon deliverable such as financial tracking, status reporting maybe some meeting facilitation or risk management type activities. And the project management activities that I did weren't at that point when I was there in any case part of that scope, it was more that the team or the managers that I was reporting for my PMO activities also asked me to pick up these other, other things.
Interviewer:	<u>05:01</u>	From a point of view of Accenture being an external vendor of the service "PMO" there was a very clear list of activities and
Respondent:	<u>05:12</u>	Yeah, we worked with service catalog, that described all the activities that we would offer from this support office, from these PMO functions. And they also had we worked with a rate card for that. And I wasn't unique in that I was picking up, for example, these sort of project management activities as well, but then we would also use a different rate card for the hours that you worked on that kind of thing. And wouldn't be part of the rate card that was aligned with that service catalog of PMO activities.
Interviewer:	<u>05:53</u>	But then, even though it was not formally establish at the moment of contracting and, as you said, you were not unique in the fact that you took other activities. Could you say that, in the case of the client, these are the informal or the in loco, in practice activities of the PMO? Because there are more cases like this.
Interviewer:	<u>06:28</u>	Yeah, that's, this is a matter of context or phrasing or it depends. I think in my, my case and activities that I was doing, I think the people I was working with saw it as the PMO picking up other activities. But I'm confident, I don't know if I can give any examples of that since it was so long ago, but that there's also have been cases for other colleagues. That they picked up things that weren't part of the original PMO scope. That were then seeing as, you know, still part of the PMO, maybe role and activity.
Interviewer:	<u>07:20</u>	The question is if you hadn't picked up the activities, would there be anyone else with could have picked it up?
Respondent:	<u>07:30</u>	Well if I hadn't done them, another project manager would have picked them up from the, like project manager pool resources and they would not have looked for another PMO to do it. I'm not saying that there's not another PMO who could've done it cause I think they could have. But, seeing how, you know, where the demand for the work to be done came from. They would have looked at one of the other project managers rather than going outside the department to look for another PMO to pick that up.
Interviewer:	<u>08:15</u>	So this scope creep perhaps is a set of activities that different people in the organisation could fulfil.
Respondent:	<u>08:24</u>	Sorry, what do you mean?

Interviewer:	<u>08:25</u>	And this extra work, those extra tasks are in the realm of content competencies that other people in the organisation could fulfil.
Respondent:	<u>08:36</u>	Yeah. Yes.
Interviewer:	<u>08:37</u>	Alright. All right, perfect. Perfect. Would you say that you had then projects in waterfall and agile or that you experienced waterfall there and agile there?
Respondent:	<u>08:54</u>	Yes. Well, depending on from what perspective and what role. Like the as the PMO, all the projects that I was involved in, 80 to 90% were agile projects and then there were some more waterfall projects, which is the remaining of 20%. The projects that I picked up as a project manager, I would say we're more the waterfall type of projects than agile. Even though there was agile development part in that as well, but that was within the scope of the external suppliers that we used. And I was not directly involved in an agile role in that development and delivery.
Respondent:	<u>09:56</u>	So going back as a PMO. So in your role as a PMO, you had at least 10% of the projects running on waterfall?
Respondent:	<u>10:04</u>	Yeah.
Interviewer:	<u>10:05</u>	All right. All right. So you'll be able to comment on the tasks and functions of the PMO in both scenarios in the firm?
Respondent:	<u>10:12</u>	Sure.
Interviewer:	<u>10:12</u>	Perfect. So I'd like to start with what activities or task, functions, whatever you want to call them, did you do in agile projects that you didn't do in waterfall projects as a PMO?
Respondent:	<u>10:33</u>	Okay. I was very, I would say limited if that's right word, to very supporting or facilitation type activities. So that's in the domain of, and that's almost regardless if the project was agile, but it was. You know, tooling support like report outs from JIRA. If it was a waterfall project, could have been, you know, that as well or in a different tool. But, because it was agile as they used Jira as a tool. Yeah, I did report outs on, you know user stories and team velocity from the agile tooling.
Interviewer:	<u>11:22</u>	So it was just a change on the KPIs that you were reporting.
Respondent:	<u>11:26</u>	Yeah. And yeah. All right. Different KPIs and tools used. And let me think. I think that's the key difference when it comes, comes down to for me.
Interviewer:	<u>11:52</u>	All right. And the other way around? Were there any activities you did in waterfall that we didn't do in agile?
Respondent:	<u>12:02</u>	Yeah. Then it was more also a bit deeper into the content of the project. So driving risk and issue management resolution and chairing weekly status meetings. That I would only have in the waterfall projects that I was involved in and not in the agile delivery because that was way more concentrated around the delivery team itself.
Interviewer:	<u>12:40</u>	But is it because these functions got redistributed to other roles in the team or, were there some of them that just got dropped.
Respondent:	<u>12:51</u>	Yeah, they wouldn't do these activities. So they have their daily stand-ups and they wouldn't have a weekly status meeting chaired by someone like me. And when it comes to biweekly demos the facilitation was done by some of the scrum coaches and later ScrumMasters and not by the PMO.
Interviewer:	<u>13:17</u>	What about the risk management?

Respondent:	<u>13:20</u>	Some of that was there. Indeed. but that would resolve from say some of the takeaways when there was a scrum of scrums or if I've had instances where scrum masters or product owners wanted to change something in the tools they used, you know, different configurations. They would come to me to set that up or to try and see if I could make that work for them.
Respondent:	<u>13:57</u>	But, then again, you come to like tooling specific support. When it comes to the risks, yes. From the scrum of scrums, it could be risks that or issues usually not risks as I would say, issues that they wanted me to address or pick up. And that came down to like aligning or streamlining a process with the IT portfolio office or ITPMO because that was an office that expected report outs or things to be delivered or done by the online eCommerce department that I was working for directly. And that wasn't always in line or in with how they were doing things. So they wanted me to try and resolve it, go into a discussion with the people from the other department and see if he can find an alternative way to do it or you know, come up with a solution that wouldn't create more overhead or more work for the online eCommerce department or program. But we'd still meet with the reporting requirements or wishes from the IT office.
Interviewer:	<u>15:24</u>	Would you say that this IT office, that they were coordinating the transition to LeSS?
Respondent:	<u>15:30</u>	No, no, no. This, I think you probably already heard another interviews the like the main PMO office was situated under the core IT department and you had these pillars of different departments, like a supply chain department or commerce department.
Interviewer:	<u>16:02</u>	And I was with the online eCommerce domain, which all had their own, you know business as usual in the business departments and their supporting IT teams or IT departments. Yes. And at least when I started there or when I was there, it was from, for most departments, very much siloed organization where business and it was very separated. And the IT teams or IT departments supporting their respective domains. You could see them roll up easily to this main it department where the PMO office was situated under as well. But for the online e-commerce domain that I was working for, it was quite like different roles, a disconnect where business and IT was much, much more close working much closer together and they saw themselves really as their own separate entity. Which they were, they were a separate operating company as well, like within the structure of the client. Which was that IT department that was talking about before with the PMO office and then you had subsidiary 1, subsidiary 2 and subsidiary 3.
Interviewer:	<u>17:31</u>	But the online area was its own separate operating company as well. So in that sense it was a bit of a It's own entity and I don't know why or how we got to this point or where I was going with this, but, Oh yeah, that was
Interviewer:	<u>17:54</u>	Who was driving the LeSS?
Respondent:	<u>17:55</u>	[Cross-talk] Different organization than indeed. And the driving of the LeSS camereally from within that from within the IT team or with from the yeah, online operating company itself rather than the
Interviewer:	<u>18:13</u>	So the branch IT team, not the holding IT team.
Respondent:	<u>18:17</u>	Exactly. Right.
Interviewer:	<u>18:19</u>	All right. Would you say that there is synergy between this transformation with the other silos or other branches? Were they also going towards less?
Respondent:	<u>18:33</u>	No, I don't think so. They were really a front runner and more mature in their whole agile way of working. But I don't think the other organizations or other departments were necessarily adopting their way of working. They would try to synergize in areas were they could use each other like use the same tooling. But even that failed or as far as I witnessed it because then we got to the point where they wanted to Online ecommerce area was using Jira for a long time already. And then other teams or other departments wanted to start using Jira as well or had their own instances set up because one or two projects started using agile and would have their own Jira. So they set one up either just themselves within 183

their department or within they used environment of one of their suppliers. And then we came to a point where the PMO office of the main IT Department said, 'okay, we don't like this. We want to have one instance that everyone uses.' And I didn't stay until that implementation was done. So I don't know how it ended up, but I do know that from when I was there, there was this struggle or battle where the online eCommerce did not want other cause they had sort of the biggest Jira instance already, which was already on premise servers. They didn't want to just have that also used by everyone else because they didn't want to mess with their own configurations. And so there was more the opposite of synergies there.

Interviewer: <u>20:43</u> Feud pride.

Respondent:20:47And with like ways of working just disregarding tooling. Yeah, I did not see a lot of synergy
there. But yeah, maybe that still happened later. But I can say I've observed that firsthand.

- Interviewer: <u>21:11</u> Okay. Okay. Probably I think we've covered a lot of track already. I have one activity.
- Respondent: <u>21:23</u> Okay.
- Interviewer: <u>21:24</u> Which is, well, people have mixed feelings about this. But I spend a lot of time trying to find what is the role. Because that's not very straight forward. Role could be a job description or role can be a function. A role could be... Well people use the word role when you have shared responsibility over something as in someone or some entity has a role to play in this. So there is a lot of different definitions. The one I'm going with here is borrowed from storytelling.
- Interviewer: 22:02 For instance. When you have a very simple story, you have a main character and supporting characters. And you have a main role and several supporting roles. The main character drives the story to the end. We have its main role and the supporting characters make decisions that influence environment in which that main character is driving the story. If the story gets complex enough, you can't tell who's the main character, who is the supporting character as they change roles in different moments of the story. And my analogy goes on to the firm is a very complex story that doesn't even make sense to talk about main role and supporting roles. Even though I have a supporting role in the list. But then from...
- Respondent: 22:48 Okay sounds interesting.
- Interviewer: 22:48 The literature study got me this far, which is four roles usually associated with the PMO there is a coordinating role, the controlling role, the supporting role and the servicing role. Take your time to read it.
- Respondent: 23:04 Okay.

Interviewer:

23:50 So coordinating is about managing inter-dependencies and resource management. Controlling is about measuring and reporting. Supporting is about coaching and creating the environment for teams to thrive. And servicing is about performing very specific, competency related to the PMO activities to other units. And now it comes. I have this list of 36 different functions. That the PMO is usually associated with and it's also based on the literature study. And what I would like to ask you is to rank. Not rank, rate these functions from one to five. Five meaning this is a core function of the PMO. One is something that we do, but it's not really that relevant for what we do or non-applicable like when we never did this, we wouldn't ever do that.

Respondent:	<u>24:52</u>	Yeah.
Interviewer:	<u>24:52</u>	Before and after. I mean waterfall and agile is in some cases it makes sense to talk about time, but in this case I think it happens at the same time.
Respondent:	25:02	Yeah.

Interviewer:	<u>25:03</u>	And if you could also tell me which role did the PMO perform and participating in while performing these tasks, that would be great.
Respondent:	<u>25:16</u>	Okay.
Interviewer:	<u>25:17</u>	If you have any questions I will be here. Any if you have any comments, as we are recording, we can take advantage of this.
Respondent:	<u>25:26</u>	Sure. the scale again?
Interviewer:	<u>25:30</u>	Five is a core function very relevant and one is not that relevant. So it could range it.
Respondent:	<u>25:36</u>	Yeah. And that like relevancy. Can I interpret that? As you know, how much of this.
Interviewer:	<u>25:45</u>	Time you spend on it.
Respondent:	<u>25:46</u>	Exactly.
Respondent:	<u>25:46</u>	Yes. Critically How critical we was, how much time you spent. Because maybe you've got a managed to automate some of these tasks and even though it's critical, you didn't spend that much time.
Respondent:	<u>25:59</u>	No, of course. Yes. Yeah. All right guys. Okay. Alright, sure. Alright. I'll let you know if I have questions.
Respondent:	<u>26:12</u>	Some might be very straightforward. For instance, reporting is, it's controlling, but there are some further down the list that are more open to interpretation and it could have different roles participating.
Respondent:	<u>26:27</u>	Yeah. Yeah. That I find it tricky. Of course, like this pretty straight forward saying that, but then allocating into the role
Interviewer:	<u>26:35</u>	It's going to be interesting. It's a nice discussion usually is a nice discussion.
Respondent:	<u>26:39</u>	Yeah. And I can see that different people could interpreted or do it in different ways. Yes. Sort of
Interviewer:	<u>26:48</u>	That's exactly what I'm trying to observe.
Respondent:	<u>26:50</u>	Yes. Alright. Yeah. If this is in both cases, that
Interviewer:	<u>27:04</u>	For instance, one of the things that happens in other cases is in waterfall, the PMO did the measurement and did the reports and send the report.
Respondent:	<u>27:13</u>	Exactly. Yeah.
Interviewer:	<u>27:14</u>	But in a, they're agile who did this, was the team and the PMO set up the tools and help them use the tools and made sure that the environment was there. So we went from a controlling to a supporting role.
Respondent:	<u>27:32</u>	Yeah. I have that. With that first one because if I look at the I did that for both, for waterfall, it was both like building the whole reports from the ground up sitting with PMs and relevant stakeholders, gathering all their inputs and putting it all together, having them review like slide decks before sending it off. So that is like, I don't know serving as well as coordinating, I guess. They're also doing it because of control in the way to make sure the process is done.

Interviewer:	<u>28:20</u>	That's For instance, you went to the project managers because they had the data, right? But the responsibility on reporting of making the report was the PMOs.
Respondent:	<u>28:33</u>	Yeah.
Interviewer:	<u>28:34</u>	So I would say it's a controlling.
Respondent:	<u>28:36</u>	Okay.
Interviewer:	<u>28:39</u>	A servicing role would be if, for instance, upper management asked you to run a cost benefit analysis to see if the project is feasible.
Respondent:	<u>28:48</u>	Yeah.
Interviewer:	<u>28:48</u>	But then it's a very specific task that the PMO forms. So that would be the servicing.
Respondent:	<u>28:53</u>	Okay.
Interviewer:	<u>28:59</u>	But then on agile?
Respondent:	<u>29:02</u>	Yeah, still the same, although there was more of the servicing in the sense that there were different requests indeed coming in from, from upper management. Not the same management as these reports went to, but they had different requests, insights they wanted from time to time.
Interviewer:	<u>29:28</u>	It was not a periodical thing. It was more on ad hoc need.
Respondent:	<u>29:34</u>	Yeah.
Interviewer:	<u>29:34</u>	And it is kind of report right now.
Respondent:	<u>29:35</u>	Yes.
Interviewer:	<u>29:36</u>	Yes, servicing role.
-	<u>29:36</u> <u>29:36</u>	Yes, servicing role. That was much more, that was much more common there. But there were still the same monthly reports that had to be done. Similar to waterfall projects. The only thing is there, there was much more automation as in the inputs were all there and I just had to run an extract from a tool and send it across to someone else.
Interviewer:		That was much more, that was much more common there. But there were still the same monthly reports that had to be done. Similar to waterfall projects. The only thing is there, there was much more automation as in the inputs were all there and I just had to run an
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Interviewer: Respondent: Interviewer: Respondent:	<u>29:36</u> <u>30:05</u> <u>30:07</u>	That was much more, that was much more common there. But there were still the same monthly reports that had to be done. Similar to waterfall projects. The only thing is there, there was much more automation as in the inputs were all there and I just had to run an extract from a tool and send it across to someone else.I would say that was also controlling. Yes.But that's also still controlling, right? It just took me less time and less effort, but, okay. Alright.So, that is also the trend that it's very hard to separate both of the automation efforts from
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with business analysts and that kind of thing. That they would involve me in request to get some data, but ... Interviewer: 32:15 Maybe the KPIs established for the business we're not finely in tune yet. Respondent: 32:22 Ball, it was more with exploring new opportunities for... Not really necessarily running projects. So yeah, you can just really, also not the call it status reporting on the ongoing activities Respondent: That was more the nature of the servicing request. 32:47 Respondent: 32:53 That makes sense? 32:54 It does. Interviewer: The funny thing for this one and before like projects score board, I see that with does like Respondent: 34:31 RAG status report is that... Interviewer: 34:44 Yes. Respondent: Okay. With all the waterfall projects or all the projects we're expected to do that and the 34:45 waterfall projects I was involved with are fine doing that. But for the agile projects, okay we reported on it, but just to be compliant, but i was a meaningless report and it didn't say anything. So it's like, okay, it's got not applicable, but it kinda was not applicable because it didn't serve any purpose. But it could be at least one. Yeah. Not from that perspective. Interviewer: 35:36 This is the thing you see in trade literature, like books on agile. That when you're starting with the transition you make an agreement with accounting and audit say I'm going to report, but it makes no sense to my business. Yeah. That's like tips on how to get it running Respondent: 36:43 What do you mean by provide a set of tools without an effort to standardize? Interviewer: 36:46 It's sometimes we implement frames Jira and that's to standardize the work in that different groups, but sometimes the group, the team needs a tool for specific tasks and no one else needs it. And it's up to you to set it up to get it running. That would be without an effort to standardize. Respondent: 37:38 Okay. Respondent: <u>39:41</u> What's a network and environmental scanning? Interviewer: That is stakeholder mapping. Some sources have very funny names. There is a family work <u>39:44</u> as well later, which means work life balance. Interviewer: If you say managed customer interfaces, you mean the end customer of the project? Because 42:11 I can also see it as, I'm the interface of dueling that we used within, you know, for project delivery, those interfaces. What'd you mean customer of the like,? Interviewer: Oh, I'm not talking about the GUI like a interface digital, but the connection between team 42:29 and the client. It could be a internal client, it could be an end user. Interviewer: 42:45 It really depends on the type of development they are doing. Respondent: 42:51 Yeah. But now I'm thinking more stakeholder management, so not sure if that's what you mean. Interviewer: <u>43:00</u> Yeah. But not all stakeholders are clients.

Respondent:	<u>43:06</u>	No. Okay. No, of course. That's, that's true. That's very true. But the clients of the project in that case. Yes. And yeah.
Respondent:	<u>44:01</u>	Oh, how's the work-life balance. But how would, how would you rate that within the role? Or do you mean responsibility for making sure the work type balance?
Interviewer:	<u>44:17</u>	So, that would be resource management probably coordinating.
Respondent:	<u>44:21</u>	Yeah. I was not really involved in that, so that's out of curiosity.
Respondent:	<u>45:25</u>	Yeah. For risk management. Can I also look at issue management for that or
Interviewer:	<u>45:31</u>	Sorry.
Respondent:	<u>45:33</u>	This one is about risk management. When I look at risk management, I didn't think I did much of that for agile delivery. But we did talk before about issue management, which is, you know, it was originally a risk, but when we're too late in mitigating that and now it's an issue that I had a lot of involvement in. But do you really want to leave this as a risk management or could also include that when scoring this one?
Interviewer:	<u>46:06</u>	This is a very good one. I don't think that there's any room, other functions for like of putting fires off, putting out fires.
Respondent:	<u>46:19</u>	Not sure if that was
Interviewer:	<u>46:24</u>	Per definition that is not risk management.
Respondent:	<u>46:26</u>	Exactly. Exactly. So then I will just leave
Interviewer:	<u>46:29</u>	It happens due to the lack of the risk management.
Respondent:	<u>46:33</u>	Correct. Yes.
Interviewer:	<u>46:39</u>	But then there's no room for, you're going gonna make a note here. Putting fires out.
Respondent:	<u>47:24</u>	Okay. I think that is it.
Interviewer:	<u>47:32</u>	Maybe out of context question because it's been a while. How do you see the future of the PMO there? What's going to be doing? Is it still under change or
Respondent:	<u>47:50</u>	I think there's not going to be much of a PMO because most of the responsibilities or tasks are all being picked up by different, different people, different roles. Such as, you know, scrum masters, product owners to all agile delivery roles. The only role that they were focused on focusing on or leaving with the PMO by the time I left. And I'm pretty sure this is what they're still doing though I don't know is the responsibility of the for the financial reporting and yeah, that will always be the same when the allocation of budgets doesn't change because they would still yeah due their annual cycle of budgeting specific IT development budget per department that we used for projects.
Respondent:	<u>49:10</u>	If the company as a whole is transitioning to a more and more agile way of working, I would expect that to change as well. Cause then why would you need to have a project approval for I mean I'm skipping a step, but assuming they would go to a more, more mature agile portfolio management organization, I would assume they would allocate their annual budgets for, you know, a different portfolio or domain or department. They get X amount to spend. I would expect to phase out, you know, also reporting on financials of projects because that's going to disappear when you have your committed pool of resources that will be continuously working on, you know, whatever is at the top of your backlog. So I would expect that rule to either disappear or change in any case. So.

Interviewer:	<u>50:15</u>	Maybe consolidating on a portfolio level.
Respondent:	<u>50:18</u>	Yeah. So if at all, there is still portfolio or PMO office, I mean, in the future it would be really of a Portfolio office.
Interviewer:	<u>50:35</u>	And well I think that leaves me to the loss question.
Respondent:	<u>50:43</u>	Sure.
Interviewer:	<u>50:43</u>	Which is, is there anything I didn't ask you that you think is fundamental for the understanding the PMO and the PMO's change with agile in this firm? That you would like to add?
Respondent:	<u>51:03</u>	No. No. If like at a later point you have any followup questions on things we discussed when you transcribe. Then sure. You know. If you do need to clarify further or discuss the revisit, but right now I can't think of anything that's yeah.
Interviewer:	<u>51:19</u>	All right. All right.
Respondent:	<u>51:20</u>	Anything that I would still want to add at this point.
Interviewer:	<u>51:22</u>	Perfect. Well, you're going to receive the transcripts of this.
Respondent:	<u>51:27</u>	Okay.
Interviewer:	<u>51:28</u>	So you can check if I did any mistakes or misconceptions. Just be fully transparent.
Respondent:	<u>51:34</u>	Okay, cool. Alright, sure.
Interviewer:	<u>51:36</u>	Gonna stop recording now in both devices. Sure. Hopefully.

H.4.2.2. Survey Responses

Group	ID	Function	Period	Value	Role
	1	Report project status to upper management	0: Traditional	5	СТ
ing			1: Agile	5	CT; SV
Monitoring and Controlling Project Performance	2	Monitoring and control of project performance	0: Traditional	4	СТ
Monitoring and Con Project Performance			1: Agile	0	NA
and orm	3	Implement and operate a project information system	0: Traditional	5	СТ
Perf			1: Agile	3	CT; SV
nitor ject	4	Develop and maintain a project scoreboard.	0: Traditional	5	СТ
Mo Pro			1: Agile	1	СТ
Ħ	5	Develop and implement a standard methodology	0: Traditional	4	СТ
es			1: Agile	0	NA
nage logi	6	Promote project management within the organization	0: Traditional	3	СТ
Ma Iodo			1: Agile	0	NA
Jeth	7	Develop competency of personnel, including training	0: Traditional	3	СТ
f Prc nd N			1: Agile	3	СТ
nt o: ies a	8	Provide mentoring for project managers	0: Traditional	5	СТ
pme			1: Agile	0	NA
Development of Project Management Competencies and Methodologies	9	Provide a set of tools without an effort to standardize.	0: Traditional	0	NA
Der Cor			1: Agile	5	SV

Group	ID	Function	Period	Value	Role
	10	Coordinate between projects	0: Traditional	0	NA
			1: Agile	3	CR
	11	Identify, select, and prioritize new projects	0: Traditional	0	NA
nt			1: Agile	3	SV
eme	12	Manage one or more portfolios	0: Traditional	3	SP
Multi-Project Management			1: Agile	3	SP
t Ma	13	Manage one or more programs	0: Traditional	0	NA
ojec			1: Agile	0	NA
i-Pr	14	Allocate resources between projects.	0: Traditional	0	NA
Mult			1: Agile	0	NA
	15	Provide advice to upper management	0: Traditional	0	NA
			1: Agile	3	SV
	16	Participate in strategic planning	0: Traditional	0	NA
			1: Agile	0	NA
	17	Benefits management	0: Traditional	0	NA
			1: Agile	0	NA
	18	Network and provide environmental scanning.	0: Traditional	0	NA
			1: Agile	0	NA
	19	Monitor and control the performance of the PMO	0: Traditional	5	СТ
			1: Agile	5	СТ
	20	Manage archives of project documentation	0: Traditional	5	СТ
			1: Agile	0	NA
nt	21	Conduct post-project reviews	0: Traditional	3	СТ
eme			1: Agile	0	NA
Strategic Management	22	Conduct project audits	0: Traditional	0	NA
			1: Agile	0	NA
tegic	23	Implement and manage a database of lessons learned	0: Traditional	0	NA
Strat			1: Agile	0	NA
	24	Implement and manage a risk database.	0: Traditional	5	СТ
			1: Agile	0	NA
	25	Execute Specialized Tasks for Project Managers	0: Traditional	5	SV
			1: Agile	0	NA
	26	Manage customer interfaces	0: Traditional	5	CR
			1: Agile	0	NA
	27	Recruit, Select, Evaluate, and Determine Salaries for	0: Traditional	0	NA
		Project Managers	1: Agile	0	NA
	28	Project administrative support	0: Traditional		NA
			1: Agile	5	СТ
	29	Work-family equilibrium	0: Traditional	5	СТ
			1: Agile	0	NA
	30	Developing the change management database	0: Traditional	0	NA
			1: Agile	0	NA
	31	Portfolio problem solving	0: Traditional	5	SV
er.			1: Agile	5	SV
Other	32	Cost/benefit analysis of projects	0: Traditional	0	NA

Group	ID	Function	Period	Value	Role
			1: Agile	0	NA
	33	Risk management	0: Traditional	4	СТ
			1: Agile	0	NA
	34	Project/program delivery management	0: Traditional	5	CR
			1: Agile	0	NA
	35	Project management benchmarking	0: Traditional	0	NA
			1: Agile	0	NA
	36	Managing stakeholders	0: Traditional	5	CR
			1: Agile	5	CR

H.4.3. Interview with Consultant 3 H.4.3.1. Transcripts

Date: 12/08/2019 Recording: Windows 10 Recorder and Android recorder. Time: from 13:30 until 15:00 (UTC+01:00) Interviewer: Henrique Cleto Carneiro Location: Respondent's office. Interviewer: <u>00:01</u> And with this one. Perfect. Alright, so first some demographic questions. I like to call them this. This company is part of which industry? Respondent: 00:14 The products industry, Interviewer: 00:16 Products industry. And specifically in the food retail. Respondent: <u>00:17</u>

- Interviewer: <u>00:20</u> Alright. How many employees, a ballpark notion, does this company have?
- Respondent: 00:24 Ooh, that's a good one. As they're part of an organisation that's operating worldwide. I don't know that number, but approximately 7,000 in the Netherlands I guess.
- Interviewer: <u>00:39</u> And they are working with some kind of agile methodology?
- New Speaker: <u>00:42</u> Yeah.
- Interviewer: 00:42 Is there a specific one?
- Respondent: 00:47 From what I've seen there, they're at least working scrum. So, within the teams and they're also applying sort of LeSS methodology as a department. Yup.
- Interviewer: 01:02 Alright. And how many teams are involved with working in these methodologies? How many use these methodologies in their daily work.
- Respondent: <u>01:11</u> The department that I've worked in was, I guess 16 teams, something 16 to 20.
- Interviewer: <u>01:17</u> Would it be roughly how many people in each team?
- New Speaker: <u>01:20</u> Around six.
- Interviewer: 01:24 Okay. Okay. And what, how would you describe your part in the company, in the project?

Respondent:	<u>01:31</u>	Yeah. What I was involved in was more or less the program management team. I was working with person who was responsible for capacity, so that we have enough people with the right skills within the teams to do the work. That also entails keeping an eye on the finances of the program. Onboarding of those people, of course, invoicing having contact with suppliers for CVs. So mostly the things that we're compliant complimentary. Is that the word? Well the things that were also necessary to do the work. So not the development work itself, but more or less stuff that around that.
Interviewer:	<u>02:38</u>	Okay. Okay. And before this transition to LeSS and scrum, I did the company have a PMO of some sort?
Respondent:	<u>02:49</u>	Yeah. Yes.
Interviewer:	<u>02:50</u>	All right. Okay. and what would you describe some of your tasks? Could you go into more detail on what else did the PMO will do at this company? What are the functions maybe other people in the team had?
Respondent:	<u>03:13</u>	Well the PMO team was a sort of a centralised team with representatives in the departments. So I was at the IT online department, but there was also a supply chain department. So, I think nine or 10 different departments and they all had a PMO.
Interviewer:	<u>03:32</u>	Okay. Okay. So it was completely distributed in the different departments.
Respondent:	<u>03:39</u>	Right.
Interviewer:	<u>03:40</u>	And would you say that the tasks or functions of these people in different departments differed much?
Respondent:	<u>03:47</u>	Nope. Nope. It was basically the same, quite the same task. There are some nuances between the departments maybe, but it's comparable. Yeah.
Interviewer:	<u>03:58</u>	And if you think about the the network of the PMO. So, there are people that use the services the teams get the don't bother the people or some tooling or some systems. [interruption] So, for the teams, there is a specific function of providing standards or tools or software?
Respondent:	<u>04:33</u>	Not really, to be honest the PMO was only marginally involved in what the teams were doing apart from the fact that we took care of probably new people if that's needed. Keeping an eye on that. All the skills were there to do the work. And what I did later was also facilitating agile coaches in some workshops and and getting people together but not on a level of really development.
Interviewer:	<u>05:10</u>	And was there anyone you responded to in the
Respondent:	<u>05:14</u>	My program manager only.
Interviewer:	<u>05:16</u>	Here at?
Respondent:	<u>05:19</u>	Nope. From client's side.
Interviewer:	<u>05:19</u>	From the client site. Perfect. Perfect. Would you say that the function that you had are in line with the, with the responsibilities you expected to have in that role?
Respondent:	<u>05:35</u>	Yeah, we made that quite clear before I started at the client. What I what I would do and what I also wouldn't do. Also I took over the role of someone else from Accenture. So it was quite easy to just grab a coffee with that person and getting to know the role. Yeah. That really helped. Because there was some space to also bring on the table your own experience and things you want to improve maybe. And that is also what I did, but that was not really

Interviewer:	<u>06:12</u>	In the scope.
Respondent:	<u>06:13</u>	Not the per se.
Interviewer:	<u>06:15</u>	Okay. Okay. So do you see that any of the tasks that you performed were a result of ther agile transition or particularly because of the agile methodologies that they had in place?
Respondent:	<u>06:36</u>	One initiative we started was around time writing and, well they didn't call it like that, but it's comparable with our WBS system here. Which was quite interesting because when you work scrum, you don't really have an idea in advance of what you will do next time, right? It's really fluent. But the teams perform work for guys over there, guys over there, another department, another guy with the requests. So it's was really hard for them to write their time properly because one hour you worked for the supply chain department and another you worked for the online department. So it made it very hard for the teams to write their time. So they found out another Excel sheet, it was really a monster. I really hated that one. And it took a lot of effort for me to get that excel filled and I didn't really see the purpose. And it doesn't work very well. So we started the project to replace that one with proper time writing. So we investigated okay, we took each team, okay guys, what where do you usually do on a monthly basis or something? And we found out that they only had three, maybe four, sometimes people they responded to which made the problem a lot easier because well, four hour codes in a month. Yeah. That's quite good, right? And we also gave them yeah, sort of manual to to see To determine how much time they could book on certain hour code. So if you have five minutes for one person a day, forget about it. It's not that important, right? So just a ballpark estimate what you did that day was sufficient and that saved me a lot of time in the end. And also the program management that much better view of what the teams were doing and how much that approximately costed. So they could also make agreements with other people about what they would get for the for the money they provide.
Interviewer:	<u>09:27</u>	So it's a standardisation of a process that gave more transparency perhaps to the data.
Respondent:	<u>09:34</u>	Yep, definitely. Yes.
Interviewer:	<u>09:35</u>	Right, right. And would you say that there is anything that the PMOs there used to do that got dropped out or re-distributed with the agile implementation?
Respondent:	<u>09:50</u>	What they did as I said, they did program management themselves, created sort of an Excel unit that you had to fill in. And then all the POs had to fill it in and all sorts of people took a lot of time. Nobody did it and it didn't work so that we kicked out a doesn't exist anymore. So that's a win, I guess.
Interviewer:	<u>10:14</u>	No, but I mean, what I mean is for instance well the PMOs before, might have to check the productivity of the team in some kind of standardized KPIs system that they might not do it now or do differently. Can you recall any of these particular tasks that are not being done?
Respondent:	<u>10:40</u>	Well, the PMOs before me, who did my role used that Excel and they said it was a pain in the ass. Excuse my French. So I guess that made it easier for me and all the people coming after to me to that role to do the work. So yeah, that's way easier.
Interviewer:	<u>11:12</u>	Let me see, is there anything in the, in the scope that you had that was a pain for the company in the sense that, Oh, you talked about the spreadsheet, there was initially a vein and it got redesigned. But something that you didn't either didn't get the time to redesign or was not the focus that was a problem to the teams? Specifically, something that would be added with agile.
Respondent:	<u>11:42</u>	Well, I'm not sure if I understand correctly, but they were already working agile before I came in, so I don't, the situation where they didn't work agile. So that's a good one. I remember from the team I was a scrum mouse for is that they were quite used to waterfall working still. They were older guys. So, sometimes they add a bit of trouble doing these scrum meetings because they didn't really see the purpose of them. "Oh, we have another meeting". Well it is designed to reduce the total amount of meetings. I find it hard to answer your question because
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Interviewer:	<u>12:45</u>	So maybe if we rephrase it in some different way. So, I imagine that you have had other projects othe clients that they worked in a waterfall model. How would you see the tasks that you performed in these other clients that you didn't have to perform at this particular client? That was on agile
Respondent:	<u>13:17</u>	Yeah, for me it's a bit hard to to answer different than to compare it because I was working only at CPMO before this role, so I have no comparison material with my first role at the client. But I think it's The big advantage of working agile is what I saw at least set you really have to push to get a product sort of done quick, so you have a very short feedback loop. And what they made for my team for example usually was out in a month so you could see it life and it worked and it was implemented. Whereas if you have a waterfall project, you have a, usually quite long with the fixed goal project. But it never works. It's always outdated when it's finished. So that's the difference I saw between the account I was working for internally and the projects and the client was where I was at the client side. That's a difference I can I can see clearly.
Interviewer:	<u>14:42</u>	Okay. Is there anything that you miss while working this client, the last one, the case that we're talking about, that you had seen in waterfall methodologies or maybe had used and these CPMO roles and that you've missed, that you think that it could benefit if they had that kind of services for the PMO?
Respondent:	<u>15:14</u>	In general, I guess a, sometimes an agile environment misses a clear decision maker. Because sometimes it stayed in the middle who should decide and often also someone made a decision then the rest didn't agree because they thought they should do it. And so that's an advantage of waterfall method, I think. In terms of what a PMO does. In an agile environments, your role is quite ad-hoc. So it's not really predictable. It's not predictable what you do on a monthly basis or less than a internal account where they work waterfall. But that makes it more exciting I think. Not really. More annoying cause that's some people like it when every month as the same cadence, right? Although you have a sort of a rhythm with sprint length and all the artifacts and the meetings that go around that. Yeah, I enjoyed it more exciting ad-hoc stuff.
Interviewer:	<u>16:48</u>	Perfect. Perfect. All right. Ad-hoc. Oh, I have a list. Quite extensive. So I will, yeah, I'll kinda let you decide on how to approach this. This is a lists of functions, 39 functions, that are usually associated with the PMO.I put that before and after in the case that you knew the, the company before the agile transformation, which is not applicable. So just answer on the 'after'. And I'd like to, to, to see which of these functions are related to your role. And he goes from one almost non-related to seven. Very to five. Sorry. Very, the original one was seven. Very related. And there is a description of what I mean with roles right here. So there are four basic roles. The coordinating role, the controlling role, the supportive role and the servicing role. The coordinating is related to when you have to manage capacity, allocate different people to different projects, allocate budget to different projects.
Respondent:	<u>18:20</u>	Yeah.
Interviewer:	<u>18:20</u>	Controlling is about measuring and reporting supporting things about standardizing methodologies, mentoring, training people and servicing is conducting very specific tasks that only the PMO would have expertise to do. And so if you could then as well associate, how important was that function to your role with which of these basic roles were you most likely conducting when you were performing this.
Respondent:	<u>18:54</u>	Sure.
Respondent:	<u>18:54</u>	And I leave it up to you if you want to do it now and here and that I'm available to take any answer, any questions on what do I mean by that function or if you want to do it in your own time later.
Respondent:	<u>19:11</u>	And you don't want me to do it out loud, right?
Respondent:	<u>19:16</u>	If you want.

Respondent:	<u>19:17</u>	No, that's a, that's fine. Otherwise your transcript as you fit a longer.
Interviewer:	<u>19:21</u>	But sometimes it is also good cause it's I could already record what you're thinking about when you're answering.
Respondent:	<u>19:32</u>	But I can do the before as not applicable, right?
Interviewer:	<u>19:36</u>	Yes, exactly. Not applicable.
Respondent:	<u>19:39</u>	Sure. I can do it now.
Respondent:	<u>20:16</u>	In the role, can I
Interviewer:	<u>20:18</u>	You can put it more.
Interviewer:	<u>20:19</u>	Yes, yes. Sometimes it's very hard to separate only one road, right?
Respondent:	<u>20:24</u>	Yup.
Respondent:	<u>20:47</u>	That one is easy.
Respondent:	<u>21:56</u>	What do you mean by that project scoreboard
Interviewer:	<u>22:01</u>	Keeping track which projects were successful, which were not how far are they to completion. Or it could be the other way. It could be the agile way with burnout charts.
Respondent:	<u>22:14</u>	Yup.
Respondent:	<u>23:15</u>	Can I also keep the role empty?
Interviewer:	<u>23:30</u>	The role empty? Not really Why would you?
Respondent:	<u>23:39</u>	It's more of the question: Whose role should it be then? If I have here one, zero actually.
Interviewer:	<u>23:46</u>	Ah, okay. It would be zero. I mean, when it's zero, then put an NS as well.
Respondent:	<u>23:52</u>	Yeah. Sorry about that.
Interviewer:	<u>23:54</u>	No problem.
Respondent:	<u>24:44</u>	Am I the first interviewee or no?
Interviewer:	<u>24:46</u>	No, I already asked a few.
Respondent:	<u>24:49</u>	I was hoping you would say no.
Interviewer:	<u>24:56</u>	Why?
Respondent:	<u>24:56</u>	It's good to have some experience with a few.
Interviewer:	<u>25:00</u>	This is already the third design of this table. And so not one that I like yet.
Respondent:	<u>26:20</u>	Hey, by the way, I heard that the role I did at the client at first. The entire department is going, the role doesn't exist anymore.
Interviewer:	<u>26:33</u>	Why? Are they going through other organizational change?

Respondent:	<u>26:37</u>	Yeah. What they did is a, the central PMO team has been canceled or would you call it? And part of them got another job at same company but different role. And so all of them were hired by the department specifically. So there's no central PMO anymore, but only department PMOs in the organization.
Respondent:	<u>28:15</u>	What is an environmental scanning?
Interviewer:	<u>28:19</u>	Sorry.
Respondent:	<u>28:21</u>	Question 18 network and provide environmental scan.
Interviewer:	<u>28:25</u>	It relates to mapping the connections and Like stakeholder mapping.
Respondent:	<u>28:33</u>	Okay. Right. Yep. Yep. Okay. yeah, not really.
Interviewer:	<u>28:53</u>	Romance is actually not a good word for this.
Respondent:	<u>28:57</u>	I was thinking about a, well, scanning some landscape or something.
Interviewer:	<u>29:02</u>	Impact assessment. Sounds like it.
Respondent:	<u>30:25</u>	Sort of I chased people where to do that.
Respondent:	<u>30:59</u>	Implementing and managing a database of lessons learned, does that also count for the teams or for yourself as PMO only?
Interviewer:	<u>31:07</u>	What do you mean? The activities, lessons that you, yourself learned or lessons that the team learned?
Respondent:	<u>31:14</u>	Both.
Interviewer:	<u>31:17</u>	Yes, it would be both. So, the team has new knowledge and the PMO cares for it. Curates it.
Respondent:	<u>31:28</u>	Yep. That's what we did.
Respondent:	<u>33:10</u>	A lot of variation in the topics.
Interviewer:	<u>33:14</u>	What do you mean?
Respondent:	<u>33:17</u>	For example, the recruits like evaluate and determine salaries for project managers and then work family equilibrium does last.
Interviewer:	<u>33:29</u>	So the first 25 are from one study that was the most comprehensive one and there it group by clusters and after the 25th, they're five that they couldn't close in any of the others in the same study. And then there are other references that I also found they have different activities that were not in the first 29.
Respondent:	<u>33:55</u>	Yeah. Okay.
Interviewer:	<u>33:56</u>	So I went on adding, it goes to illustrate how diverse is the contexts?
Respondent:	<u>35:43</u>	Right.
Interviewer:	<u>35:43</u>	Perfect. Thank you.

Interviewer:	<u>36:02</u>	Well, was there any things that I didn't ask you that you would like to hide that's fundamentally important for understanding the PMO at the client at that time?
Respondent:	<u>36:14</u>	Well, it's maybe good to know that we were with a quite large Accenture team there. They basically asked Accenture to fill in several PMO roles. So there were some project managers, but also welded more classic PMO people like myself. And they gradually insourced all of those roles. So they just hired people to do that. Which made it interesting for us to look for other roles within our departments for the exchange people. So I became a scrum master and partly a project manager. There were people who became product owners. Some people kept their projects like as a project manager, but they were done instead of hired by the central PMO who were going in the station by the departments themselves. So that was quite a, quite a shift.
Interviewer:	<u>37:15</u>	And do you see that that influences the quality of the PMO. If it's internal or external?
Respondent:	<u>37:24</u>	Yeah. What I found out that they were less flexible or something, no, no exchange of people are usually quite curious and always looking for another next step improvements. And people took over from us, they're really were less capable to do that. I think. It's not that I want to be rude or something. And the quality of the work was less.
Interviewer:	<u>38:10</u>	Alright. Okay. Well, I think I'm good. So don't have enough data. I've stopped recording then.
Respondent:	<u>38:18</u>	Okay. Yeah. Thank you.
Interviewer:	<u>38:20</u>	Thank you for participating. And.

H.4.3.2. Survey Responses

Group	ID	Function	Period	Value	Role
Monitoring and Controlling Project Performance	1	Report project status to upper management	0: Traditional	0	NA
			1: Agile	5	CR; CT
	2	Monitoring and control of project performance	0: Traditional	0	NA
			1: Agile	4	CR
and	3	Implement and operate a project information system	0: Traditional	0	NA
Perf			1: Agile	3	CR
nitor	4	Develop and maintain a project scoreboard.	0: Traditional	0	NA
Mo Pro			1: Agile	1	SV
Ħ	5	Develop and implement a standard methodology	0: Traditional	0	NA
eme			1: Agile	5	CT; SP
Development of Project Management Competencies and Methodologies	6	Promote project management within the organization	0: Traditional	0	NA
	_		1: Agile	0	NA
	7	Develop competency of personnel, including training	0: Traditional	0	NA
			1: Agile	4	SV
	8	Provide mentoring for project managers	0: Traditional	0	NA
pme tenc			1: Agile	0	NA
Develo] Compet	9	Provide a set of tools without an effort to standardize.	0: Traditional	0	NA
			1: Agile	3	SP
Multi-Project Management	10	Coordinate between projects	0: Traditional	0	NA
			1: Agile	5	CR
llti-F nag(11	Identify, select, and prioritize new projects	0: Traditional	0	NA
Mu Ma			1: Agile	0	NA

Group	ID	Function	Period	Value	Role
	12	Manage one or more portfolios	0: Traditional	0	NA
			1: Agile	4	CR
	13	Manage one or more programs	0: Traditional	0	NA
			1: Agile	4	CR
	14	Allocate resources between projects.	0: Traditional	0	NA
			1: Agile	5	CR
	15	Provide advice to upper management	0: Traditional	0	NA
			1: Agile	5	CR
	16	Participate in strategic planning	0: Traditional	0	NA
			1: Agile	0	NA
	17	Benefits management	0: Traditional	0	NA
			1: Agile	0	NA
	18	Network and provide environmental scanning.	0: Traditional	0	NA
			1: Agile	0	NA
	19	Monitor and control the performance of the PMO	0: Traditional	0	NA
			1: Agile	3	CR
	20	Manage archives of project documentation	0: Traditional	0	NA
			1: Agile	4	SP; SV
It	21	Conduct post-project reviews	0: Traditional	0	NA
eme			1: Agile	2	SP
nage	22	Conduct project audits	0: Traditional	0	NA
Ma			1: Agile	0	NA
Strategic Management	23	Implement and manage a database of lessons learned	0: Traditional	0	NA
Strat			1: Agile	4	SP
	24	Implement and manage a risk database.	0: Traditional	0	NA
			1: Agile	0	NA
	25	Execute Specialized Tasks for Project Managers	0: Traditional	0	NA
			1: Agile	4	SP
	26	Manage customer interfaces	0: Traditional	0	NA
			1: Agile	0	NA
	27	Recruit, Select, Evaluate, and Determine Salaries for	0: Traditional	0	NA
		Project Managers	1: Agile	0	NA
	28	Project administrative support	0: Traditional	0	NA
			1: Agile	5	SV
	29	Work-family equilibrium	0: Traditional	0	NA
	L		1: Agile	0	NA
	30	Developing the change management database	0: Traditional	0	NA
			1: Agile	0	NA
	31	Portfolio problem solving	0: Traditional	0	NA
			1: Agile	4	CR
	32	Cost/benefit analysis of projects	0: Traditional	0	NA
			1: Agile	4	CR; SP
	33	Risk management	0: Traditional	0	NA
er.	L		1: Agile	0	NA
Other	34	Project/program delivery management	0: Traditional	0	NA

Group	ID	Function	Period	Value	Role
			1: Agile	4	CR
	35	Project management benchmarking	0: Traditional	0	NA
			1: Agile	0	NA
	36	Managing stakeholders	0: Traditional	0	NA
			1: Agile	5	CR
Appendix I Aggregated survey results I.1 Monitoring and Controlling Project Performance









I.2 Development of Project Management Competencies and Methodologies











1.3 Multi-Project Management











1.4 Strategic Management



















1.5 Other



























Appendix J Data analysis J.1 Survey J.1.1. Deviation on answers

Value given to each function

Period



