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Integrating innovation in public sector:

A case study of Norwegian municipalities

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Preface and acknowledgments

The completion of the master thesis marks the end of a master program at Molde University College - Specialized University in Logistics. Completing this thesis has sometimes seemed impossible, due to challenges of balancing full-time work, studying and life generally. However, at last it seems as though we are reaching the end of it. The last two and half years as a student at Molde University College - Specialized University in Logistics has given me a larger understanding of supply chain management and logistics generally. The master's program has equipped me with skills and knowledge necessary for my field, which I have already applied some and will continue implementing as well as improving upon. For this I am forever thankful, Molde University College.

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Finally, I would like to reach a special thanks to my partner, Ms. Regine Stokkevåg Eide, for cheering me on, giving motivation and listening to me complain.

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Ali Seena Jamali

Norsk abstrakt

Norsk offentlig sektor og kjøpekraften de besitter kan brukes mer effektivt for å fremme innovative løsninger som skaper verdi for innbyggerne. Politiske målsetninger og initiativ ønsker å bruke kjøpekraften som et strategisk verktøy, til tross for dette virker det som om det mangler forankring for innovasjon i offentlige anskaffelser (IOA). Hvert år brukes over 700 milliarder kroner fra det offentlige på innkjøp, men bare tre prosent av alle anskaffelser i det offentlige er innovative. Målet med denne oppgaven var å undersøke hvordan IOA har blitt integrert i kommuner over hele landet, og om politiske initiativ har hatt noen effekt.

Gjennom semistrukturerte intervjuer ble dataen samlet og totalt sju respondenter, både innkjøpsledere og innkjøpsrådgivere, ble spurt om IOA. Respondentene ble delt inn i tre kategorier, små, mellomstore og store, avhengig av befolkningstallet i kommunen. Oppgaven presenterer både særtrekk ved hver kategori og fellestrekk på tvers av kategoriene. Det er fire åpenbare funn på tvers av kommuner. For det første kan modningen som har skjedd i offentlige anskaffelser ses på som en forutsetning for IOA. For det andre påvirker allokering av ressurser evnen til å implementere IOA. Avhengig av ulike faktorer kan fordeling av ressurser både fungere som en drivere og barriere. For det tredje påvirker organiseringen av innkjøpsfunksjon evnen til å integrere innovasjon. Til slutt er mangelen på standardisering av måleparametere for innovasjon en stor barriere.

Selv om det er mange barrierer som fortsatt er til stede og påvirker evnen til å integrere IOA, har IOA skapt verdier for samfunnet. Dette viser at det er mulig å bruke offentlige anskaffelser som et strategisk verktøy, men vi må legge enda mer til rette for IOA dersom vi ønsker å høste større gevinster. Tiltakene som er beskrevet i denne oppgaven tar for seg mentorbasert tilnærming, revurdering av måten kommuner organiserer innkjøpsfunksjonen sin og implementering av prestasjonsmåling på IOA. Mentorbasert tilnærming handler om å sette kommuner som har i større grad implementert IOA i kontakt med kommuner som er i startfasen. Alle disse tiltakene kan være med å forsterke IOA rolle i offentlig sektor, og resultere i bedre ressursutnyttelse fra kommuner.

Abstract

The Norwegian public sector is a significant purchaser of services and goods, and the purchasing power they possess can present a huge avenue to achieve better solutions to social problems. There has been an increased focus from the policy makers and managers to use public procurements as a strategic tool to facilitate for new solutions to solve today's problems. Every year over 700 billion NOK is spent by the Norwegian public sector on purchasing, however only three percent of all procurements the public sector conducts are innovative. It seems that there is a lack of anchoring for Public Procurement and Innovation (PPaI). The objective of this thesis was to investigate how PPaI has been integrated in municipalities across Norway and whether managerial and political initiative has had any impact.

The data collection was conducted through semi-structured interviews where a total of seven respondents, both managers and non-managers, were questioned about PPaI. A total of seven respondents from five different municipalities were divided into three categories, small, medium, and large, dependent on the population size in the municipality. The thesis presents enablers and drivers that are unique for each category and suggests some recommendations for managers and policy makers. Even though each category has unique barriers and enablers, the interviews and a two-step data analysis reveal four evident key findings across the categories. Firstly, the maturation that has happened in public procurement can be viewed as a pre-condition for innovation. Secondly, allocation of resources affects the ability to integrate PPaI. Depending on different factors it can both act as an enabler and barrier. Thirdly, how a procurement function is organized influences their ability to integrate innovation. Lastly, the lack of standardization in assessing innovation is a major barrier for PPaI.

Even though there are many barriers that still must be overcome to better integrate PPaI, the work undertaken until now is already realizing benefits of PPaI for social innovation and solving the challenges in the society. This shows that it is possible to use public procurements as a strategic tool, but we must increase the focus on the topic. Mentoring can be utilized as a cost-efficient way to promote PPaI, re-evaluating how procurement functions are organized and implementing performance management to assess PPaI are crucial, and will, if taken into consideration, increase the public sector's ability to innovate more.

List of abbreviations

PPaI: Public procurement and innovation

IOA: innovasjon i offentlige anskaffelser

GDP: Gross domestic product

OECD: Organization for Economic Co-operation and Development

EC: European Commission

DFØ: The Norwegian Agency for Public and Financial Management

EU: European Union

4Ps: Process, Product, Paradigm and Position

PPfI: Public procurement for innovation

PPoI: Public procurement of innovation

IPP: Innovative public procurement

SI: Social innovation

DIGDIR: Digitaliseringsdirektoratet

EDI: Employee driven innovation

KPI: Key performance indicators

AI: Artificial intelligence

LUP: Leverandørutviklingsprogrammet

SSB: Statistisk sentralbyrå

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1.0 Introduction

Innovation is about identifying opportunities for doing something new and implementing the different ideas to create growth – either socially, economically, or environmentally (Karakas, June 2020; Rønningen, 2021). Innovation can also be seen as an important driver of both economic growth and competitive advantage in all markets. Innovation in the public sector has gained more attention during the last decades due to the increased demand for more sustainable solutions (Demircioglu & Audretsch, 2017; Kundu et al., 2020). Public administrations deliver a vast amount of goods and services to citizens of a country, where they heavily rely on the private sector through contractual agreements (OECD). Twelve percent of the gross domestic product (GDP) of OECD-countries are spent on procuring goods and services. Due to this fact, countries are becoming more aware of how one can innovate the procurement processes to save costs and promote social and environmental changes (Kitchen, 2015).

Recently, the European Commission (EC) has published guidelines for innovation in the public sector (Karakas, June 2020), and based on these guidelines and other strategy documents, the Norwegian parliamentary notice “A more innovative public sector” was posted in 2020 (Government, 2020). This document gives the public sector directions and guidance on how to implement innovation. With the occurrence of these strategic documents, innovation in the public sector seems to be emphasized upon by both the Norwegian government and European Union (EU) (Kitchen, 2015).

The main idea is that innovation can help governments become more efficient and effective overall, also while procuring goods and services for the public sector. This will result in a better outcome for the taxpayers, reducing unnecessary use of governments budget, and enabling a more flexible public sector (Government, 2020). This type of innovation is believed to create positive social, environmental, and economic outcomes that benefit individuals and the Norwegian community as a whole (Government, 2020). Innovation must be a part of the way that we manage the public sector. Therefore, innovation has become a “hot topic” from both a management perspective, but also in the eyes of the public and for other stakeholders. However, in 2018 Olson postulated some clear barriers in creating an innovative procurement process in the Norwegian public sector. Practitioners in Norway are more prone to a risk averse approach because there are precarious factors when purchasing

unknown solutions (Olson, 2020). This clearly illustrates some major issues with innovation in public sector. By implementing innovation in public procurements, one can change local markets, gain more efficiency in the process, potentially reduce total costs, and create a more sustainable procurement process (Demircioglu & Audretsch, 2017). With challenges like global warming, international instability and resource scarcity, these potential outcomes of innovation in public procurement will become instrumental and therefore, the topic itself worthy to investigate and understand from a management perspective.

1.1 Motivation and background for the thesis

As a logistics officer in the Norwegian army a part of my work portfolio is to conduct procurement of necessary goods and services for a battalion. I have conducted multiple purchases of the repetitive art and been either directly or indirectly involved in multiple projects. My work is focused on purchasing, as well as being a representative for the user-perspective when discussing larger procurements. From my experience, there is little room for innovation in the procurement process due to many factors. Some of these factors were in my case, time availability and increased risk, but also the overall lack of focus from leaders in the army who oversee the procurement processes. Time availability and risk aversion are two factors that are present in other parts of the public sector (Rønningen, 2021), and this created a motivation to further investigate if this is the issue for other public sectors of Norway.

Concurrently, I was researching the topic of innovation as part of my studies at Molde University College (HIMOLDE). I got gradually more fascinated by how different companies can create competitive advantages, and how they maintain it, by being innovative in all parts of their enterprises. In-depth discussions on the topic with my peers, colleagues and professors further verified that this topic was worthy of my investigation and that I could contribute to the field with new perspectives.

1.2 Research question

To narrow it down, I will focus on how procurements of services and goods are carried out in five different municipalities and how innovation affects the process of public procurement. The main thought is that the practitioners have little to no room, for innovation

during the procurement processes. The study will therefore focus on process innovation and how this has affected the procurement process.

A mixture of challenges is present when conducting process innovation, some being managerial and others being lack of expertise. Knutsson and Thomasson (2014) mentions that public employers must create an innovation-friendly environment for their practitioners, otherwise the public procurements will be played safe, creating an inflexible process sticking to usual procedures. Although there is an amount of research analysing drivers and barriers for innovation, like policies and strategies (Government, 2020; Kitchen, 2015), there seems to be a lack of research investigating the practitioners and managers, hereafter personnel, and their experiences with innovation in their work environment. I assume that the attitude and behaviour of the personnel can help create a more innovative environment that achieves the objectives of the current policies. In this thesis I will therefore explore the personnel's experience with the concept of innovation and how it impacts their day-to-day work while conducting procurement for their municipalities and whether the process has changed or not. From these experiences one can infer an approach to integrate innovation as a fundamental part of the procurement process, enabling a framework for process innovation.

In summary, the overall aim of this study is to shed light on how to successfully integrate innovation as part of the procurement process in the public sector from the personnel perspective. To investigate this, I will therefore answer the following research questions:

1. How do managers in the Norwegian municipalities integrate innovation as a principle in the procurement process?
2. Is there room and facilitation for managers to innovate the processes, and what are their thoughts on political and managerial initiative to innovate in the procurement processes?

2.0 Literature Review

In this chapter, I will first briefly introduce the definition of procurement and summarize the research on the topic to elucidate what type of process I am attempting to investigate and how innovation is connected to it. Second, I will present the definition of innovation used for this study and recapitulate research about the process of innovation itself. Third, I will present the context that we are examining, the public sector, to understand what differs in the public sector and how some key elements, like social value affects the process of

innovation. Once all the fundamental parts have been introduced, I will finally abridge the research that examines innovation in public sector, which will lead us to drivers and barriers for innovation. I will emphasize on the role of managers in relation to the barriers and drivers, as I assume they might play an imperative role in mitigating or creating barriers.

All subchapters and summaries from the literature will be discussed in relation to relevant issues that are revealed in this study. While conducting the literature review, I found a predominance of studies focusing on policy-level, and rather few articles on the personnel who conduct public procurements and their managers, reassuring that this study can give new insight into the topic of public procurement and innovation (PPaI).

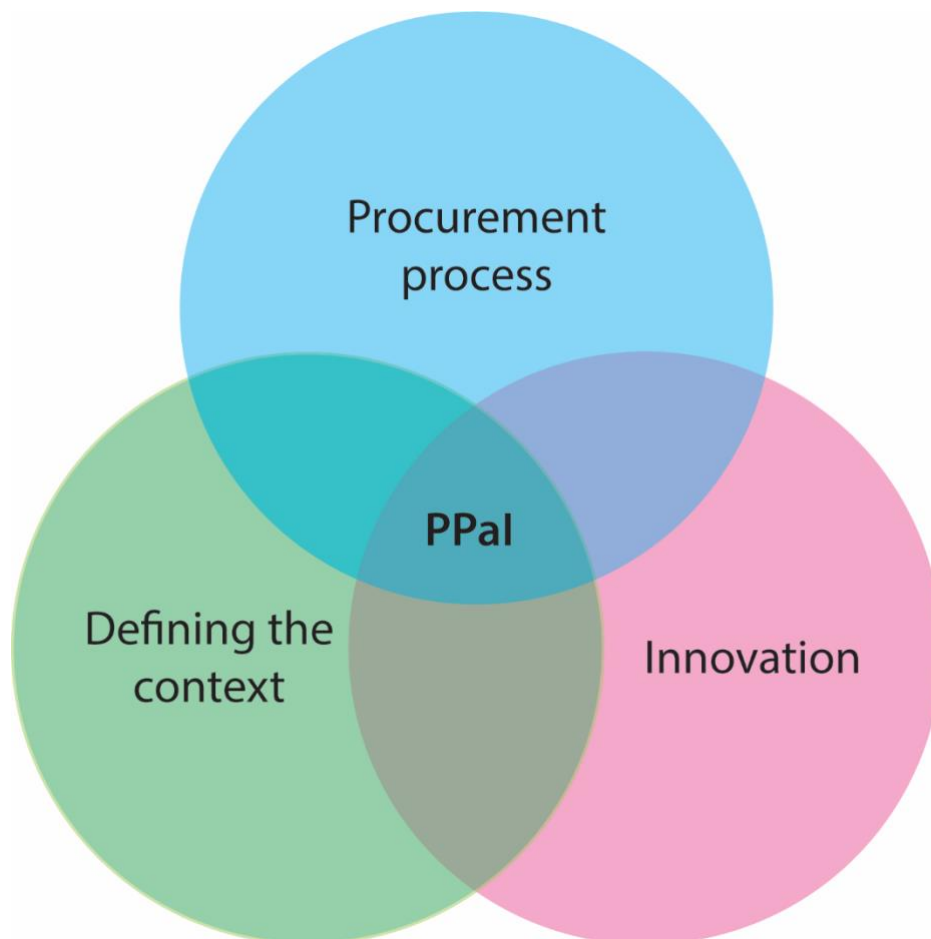


Figure 1 | The correlation of subthemes and PPaI. By presenting the different subthemes correlated to PPaI one can get a better understanding of the topic. Innovation, the context of public sector and procurement process are all complex entities which requires a clear understanding.

2.1 Defining the procurement process

To understand where and how one can innovate in a procurement process one must understand the process of procurement. In this subchapter I will therefore introduce the various aspects of the procurement process.

Public procurement is a key economic activity in all countries, and is defined as the “the purchasing of goods, services and works by governments and state-owned enterprises” (Plantinga et al., 2020). Other scholars like Schiele (2019, p. 47) focus more on the strategic aspect and defines it as: “[...]a more strategically oriented set of activities around selecting and contracting suppliers and more operatively oriented activities ensuring the ordering and delivery of materials and services”. As we can see from these differences in the definitions of procurement there is no standardized definition. However, the main understanding of procurement can be described as ensuring that the company has their demands for services or materials met to create a competitive advantage.

The procurement process is a series of steps involved in attaining the necessary goods and services corresponding to the demand. While the specific process can vary a lot dependent on the context and the demand, the typical procurement process involves three main activities, with multiple steps along the way. According to The Norwegian Agency for Public and Financial Management (DFØ) (2023) the three activities are; 1) defining requirements, 2) implementation of contract and 3) contract management. Figure 3 shows the main activities, but within these activities there are several sub-activities that is not shown. We can also see that there are mainly three dimensions that affects the procurement process, the practitioners` impact on the process, time availability and costs. This separation of activities and dimensions gives us an idea of the complexity of procurement processes. However, it also serves another purpose; it maps options as to where innovation could take place. Innovation can happen in every single step of the process giving the practitioners several opportunities if managers are aware of the possibilities and potential barriers.

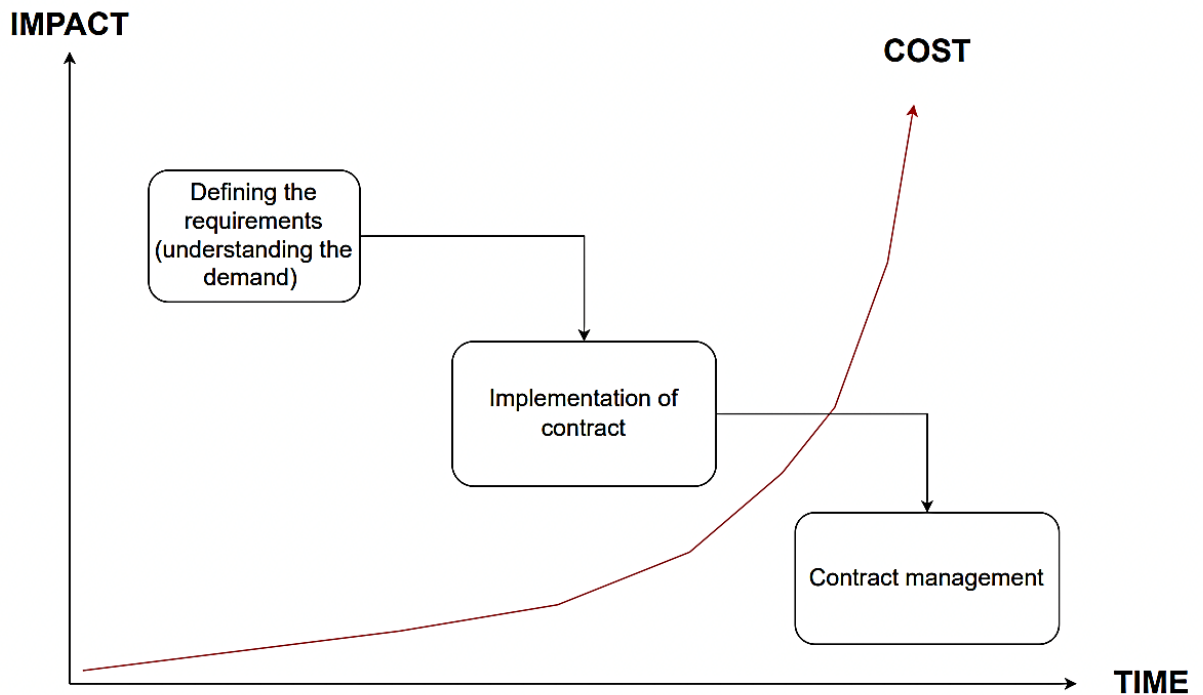


Figure 2 | *The procurement process derived from DFØ (2023). There are three main activities within the process. 1) Defining the requirement, 2) implementation of contract and 3) contract management. As we can see from the graphs there are three elements affecting the procurement process, time, impact, and cost. Following the graph, the impact of processes at the beginning are largest. Factors towards the end of the process have less impact, e.g., during the contract management.*

Additionally, the procurement is strictly regulated by laws, regulations, and norms. The Norwegian law “Loven om offentlige anskaffelser” regulates how the public sector can conduct their procurements. In summary, the complexity of the procurement process in the public sector arises because of regulations, and several sequences of tasks, which together with its several definitions complicates as to where innovation can take place.

2.2 Defining innovation

A fundamental question to ask when researching innovation is "what is actually innovation?" To understand what innovation in the public sector entails, we must first define what innovation as a process is. Research on innovation is a well-established academic field, but traditionally only for the private sector (Natário & Couto, 2022). On the other hand innovation in public sector has gained more attention recently, and we now have more research and data defining elements of innovation in the public sector (Demircioglu & Audretsch, 2017). Despite more data and research, there is no common definition that adheres to all aspects of innovation, as scholars, governments, academics, the EU, and other individuals all have different understanding and focus on innovation.

Nevertheless, I believe that Fagerberg's (2004) view and argument that innovation is as old as humankind is something that everyone can agree on. "There seems to be something inherently "human" about the tendency to think about new and better ways of doing things and try them out in practice."(Fagerberg, 2004, p. 2). This quote illustrates the core of innovation. Innovation is "something new", a new product, a new source of suppliers, new methods, coping with challenges and making our lives easier. In the parliamentary notice we can read: "Innovation means implementing something new that generates value for people and society" (Government, 2020, p. 13), which can be understood as social innovation. In the following subsections, I will present different types of innovation, the definition used, and researched, in this study, different approaches to this kind of innovation and lastly, I will briefly present some issues with the definitions and approaches that I have come across while doing the review.

2.2.1 Types of innovation

There are several types of innovation, from product innovation to open innovation. A common way to understand the different types of is by using the 4Ps method (Tidd & Pavitt, 2011). Figure 3 illustrates the 4Ps of innovation and consist of the following elements: product, paradigm, process, and position. Product innovation involves the creation of a new product or service, or the improvement of an already existing product or service. Paradigm refers to the underlying assumptions, beliefs and values that shape the way the innovation is developed; this could be the mental model that a company has while conducting their products. Process innovation is the innovation of processes and systems used to develop and implement the innovation. And lastly position innovation refers to the how the innovation is positioned in the market, what unique value proposition does it have and how does the innovation differentiate from competitors in the market (Tidd & Pavitt, 2011).

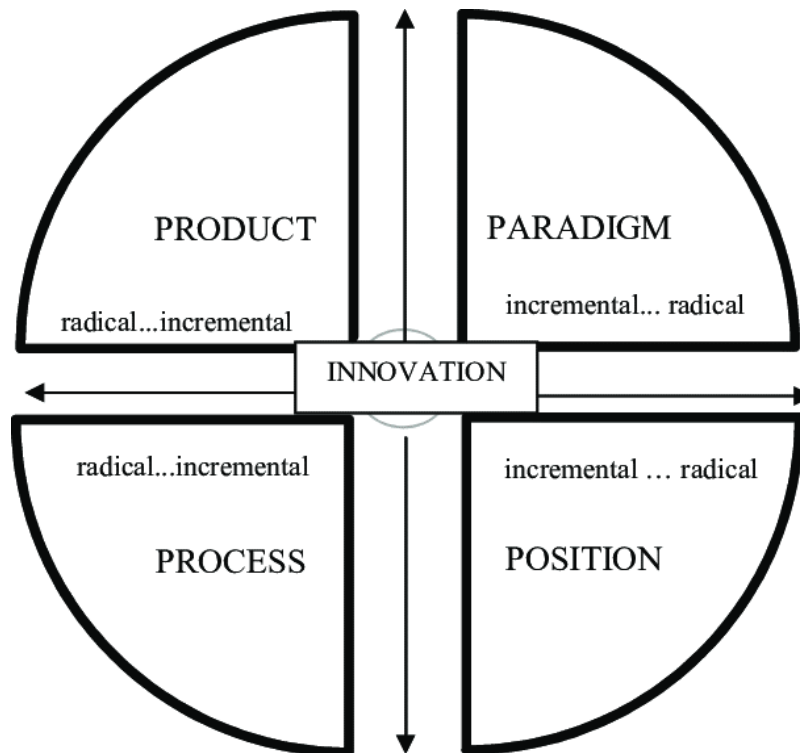


Figure 3 | *The 4Ps*. An overview of the 4Ps, product, paradigm, process, and position innovation (Tidd & Pavitt, 2011).

As we can see from figure 3, all these innovations have to be either radical and incremental. Tidd and Pavitt (2011) explain that incremental innovations involve enhancing existing products or services by making smaller improvements, while radical innovations are introducing new and innovative features that can significantly alter the markets. In other words, incremental is doing what we do better, while radical is doing something different. This kind of approach allows organizations to balance risk and reward by leveraging their existing strengths while also pursuing new opportunities for growth and development. The 4Ps can also be viewed as a tool to map innovation space (Tidd & Pavitt, 2011). The task of mapping innovation space is to understand where, and how, one can innovate, which allows the companies to better manage innovation (Tidd & Pavitt, 2011). This approach can help us categorize and define types of innovation. The question then remains on how this affect innovation in relation to the procurements done in the public sector? By using the 4Ps and discussing the role of innovation space mapping, I will during the next section define how innovation and public procurement is interlinked.

2.2.2 Public procurement and innovation (PPaI)

Taking the 4Ps of innovation into consideration it has some clear ramifications in the context of procurement in public sector. The 4Ps model can be used in public procurements to map where innovation can take place. Although public procurement and innovation is of high academic and policy interest, it seems as though there is no clear consensus on how to clearly define innovation and public procurement (Kundu et al., 2020). In a systematic literature review Kundu et al. (2020) claim that innovation in public procurement is allocated in two main categories: public procurement *of* innovation (PPoI) and public procurement *for* innovation (PPfI). However, some researchers point at three separate categories: the first two being the same and lastly innovative public procurement (Obwegeser & Müller, 2018). Figure 4 shows the differences in the three categories; the main differences being where in the value chain innovation can occur. Government entities like EC on the other hand, consider innovation in public sector with two main categories: “innovation **in**, and innovation **through**, the public sector” (Karakas, June 2020, pp. 2-3).

As we can see from the figure 4, PPaI can be separated to three different subcategories: 1) Public procurement for innovation (PPfI), 2) Public procurement of innovation (PPoI), and 3) Innovative public procurement (IPP). PPfI refers to the public procurements ability to drive innovation by using their leverage on the market, by other means using a demand-side tool to force the market to innovate (Edler & Georghiou, 2007; Obwegeser & Müller, 2018). PPoI refers more to the process of the public sector buying more innovative products, services, or work to solve their problems (Obwegeser & Müller, 2018). IPP on the other focuses more on how one can use innovative methods in public procurements, and by that innovating the process itself, and ergo also solve the societal problems more efficiently with fewer resources (Obwegeser & Müller, 2018). If we view the different capacities of PPaI in relation to Tidd and Pavitt’s 4Ps model, we can categorize PPfI as a product innovation, PPoI as a paradigm innovation and IPP can be viewed as process innovation.

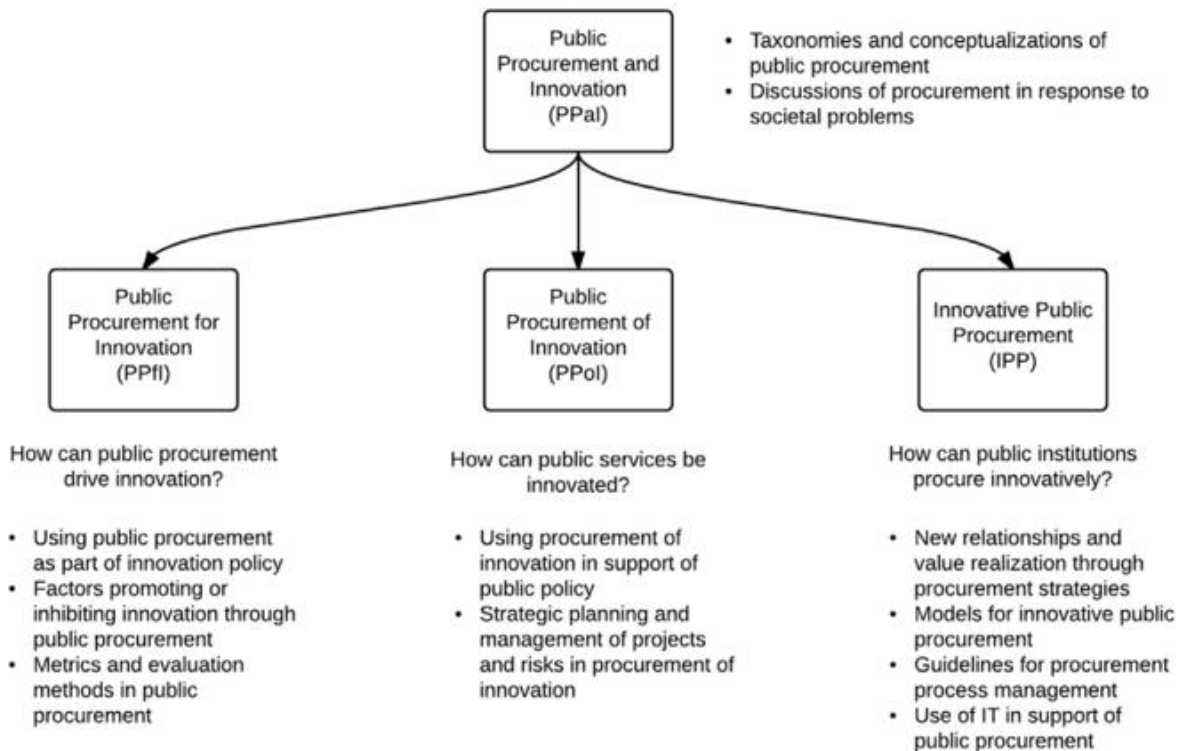


Figure 4 |Public procurement and Innovation. This figure shows the different categories, research streams and topics PPaI is usually divided to. (Obwegeser & Müller, 2018, p. 5).

Consequently, we can understand from the literature review that there are numerous capacities of PPaI. On one hand, this can act as a barrier which could have been avoided if there was a consensus of what PPaI entails. On the other hand, the different definitions is a reflection of the complexities of both public procurement and innovation. Dividing the term is from an academic perspective interesting to define, but how does this affect the practitioners of public procurement? To uncover this, I have utilized Obwegeser and Müllers definition of PPaI because of its categories covering a broad definition of the term as illustrated in figure 4.

These, abovementioned, categories are used to discuss where in the value chain innovation has occurred and whether or not it has reached the executing branches of the municipalities in this study. These categories can also define in what way innovation has occurred and additionally reveal where the potential is *unused or underused*. Furthermore, it will allow me to examine how well practitioners and managers comprehend these concepts and definitions and determine if it holds any significance for them. By understanding both 4Ps and the definition of PPaI one can assess if the municipalities can map innovation space. Mapping innovation space is a key task when a business is starting to innovate (Tidd &

Pavitt, 2011), this is to be able to manage the innovation and understand the ramifications it has. By using the 4Ps model and the different definitions business can better place innovations that have occurred, and also manage them.

2.2.3 Social innovation

Now that the outline of PPaI is established, we next examine how PPaI is seen from the perspective of the policy makers. While reviewing the parliamentary notice, I realized that the main objective stated in the document is to use innovation as a tool to facilitate for a more efficient public sector generating something of value for either the society as whole or for an unmet demand in the society. This view of PPaI can be associated with social innovation (SI). Vézina et al. (2018) define “social innovation as the process of developing and implementing solutions to social problems that are resolved poorly or insufficiently by institutional or organizational frameworks in place”. This type of innovation is naturally often associated with governments who have the power and resources to create policies and programs that promote social innovation, of which the parliamentary notice is a clear example of. Social innovation can create a variety of outcomes and impacts, depending on the specific context and goals of the innovation. The main objective however is to offer a better solution to a social problem.

However, does PPaI necessarily ensure that that all activities undertaken in the public sector creates an improved solution? Rønningen (2021) makes a valid point that innovation is not synonymous to improvement. One can innovate without improving, and one can improve without innovating. Some of the innovations implemented in the public sector during the last few years has resulted in failure rather than achieving SI. The parliamentary notice (2020) also mentions the use of digital technology as an innovation tool in different sectors. In the health sector it could facilitate better care from the health services for patients in different life situations. An example is the implementation of Helseplattformen at St.Olavs Hospital, which can be perceived as both a social- and product innovation.

The main objective with the implementation of Helseplattformen was to create a better digital journal system, which was supposed to improve the communication and cooperation between primary and secondary health services, as well as providing a higher degree of patient security (Ørnhaug, 2023). However, a report from the Norwegian Board of Health Supervision concludes that the implementation of the patient record system has created a

hazardous situation for patients (Ørnhaug, 2023). Perhaps the implementation of “Helseplattformen” can be viewed as a case where the public sector has innovated, but not improved. Although the goal is social innovation, one must be careful and assess the potential risks associated with the innovation. Another issue that the critics of public innovation often present is that the term “innovation” is misused and tossed around as magic spell that solves everything, without actually entailing a concrete plan of what they want to do and achieve (Rønningen, 2021). These two examples are fascinating and highlight important concerns with innovation in the public sector. To summarize, SI is one of the objectives when innovating in the Norwegian public sector. During the next subchapter I will investigate the concept of innovation in the context of public sector and what makes it unique.

2.3 A framework for understanding innovation in the context of public sector

There are some special concerns one must be aware of when researching the public sector. Rønningen (2021) argues that public sector can be viewed as a more complex entity than the private sector, due to the taxpayers clear (and many) expectations. One could argue that innovation processes in the public sector pose a significant challenge due to numerous factors. Political decisions often influence the innovation process, and strict regulations govern professionalism, privacy protection, equal treatment, and public participation within the administration. By establishing the different peculiarities of public sector one can create a deeper understanding of possible shortfalls, barriers and how one should handle the risks associated with them.

2.3.1 Public procurements – an enabler for social value

Firstly, I will discuss how procurement in public sector can create competitive advantage and its relation to social value. As earlier mentioned, innovation and procurements are key elements in creating - and keeping, the competitive advantage in organizations. But how does this work for the public sector when there are no one to compete against? Competitive advantage in the public sector can be viewed as even more essential. The public sector has many institutions producing the proximate services, fighting for the same resources, and therefore, they must strive to have unique characteristics and deliver the most cost-efficient services (Popa et al., 2011). One could say that the competitive advantage is tightly

connected to the social value a public institution creates. Social value is a debated term and there are different methods to view social value, such as seeing it as: “a soft non-financial benefit, an intangible outcome, sustainability, a positive social change that prevents negative social changes, or an additional benefit” (Popa et al., 2011). The definition of social value itself is an interesting topic to discuss. However, the point I am addressing is that although many assume (including me at the beginning of this paper) that they can comprehend the concept of social value, it is in reality difficult to define.

Nevertheless, social value can be viewed as the element that gives the public sector its legitimacy and support (Rønningen, 2021). By using this definition, public sector must ensure that every activity is legitimate, is supported by the public and in the public's best interest. The lack of a clear definition can cause misconception, reducing the public sector's ability to create social value and therefore also creating a more complex entity. Regardless of the definition of social value, one must ask what role does public procurement play to the creation of social value? Public procurements can be used as a facilitator to ensure social value (Natário & Couto, 2022; Rønningen, 2021). Twelve percent of the Gross Domestic Product (GDP) of all Organization for Economic Co-operation and Development (OECD) countries is spent on public procurement (OECD). Taking this into account, one can observe that the public sector has a lot of influence and that they are a significant actor in the markets. Meaning that the public sector can leverage their purchasing power to demand social and environmental outcomes and promote innovations towards the creation of social value.

2.3.2 Public governance

From the parliamentary notice “A more innovative public sector” one can read that public sector must become more efficient and effective in all parts of the sector, due to the increasing challenges awaiting Norwegian public sector (Government, 2020). Some of these challenges are the aging population, increased costs of the public sector, and the environmental changes that will affect the Norwegian economy (Government, 2020). With increased costs and greater demands from the Norwegian population considering welfare, social and environmental issues, the Norwegian government has had an increased focus on these elements (Nakken, 15.11.2021). This brings us to the balance public leaders must strive for when considering innovation and how to govern the ongoing processes (Kitchen, 2015).

Although public and private procurement have many overlapping elements there are more regulations and laws when procuring in the public sector (Schiele, 2019). In Norway, the law “Lov om offentlig anskaffelser” is implemented to ensure that the society’s resources are efficiently used and that public procurers act with integrity. These objectives are in place to uphold the public’s trust that society’s resources is managed in a socially beneficial manner (fiskeridepartementet, 2017). This is only one of the examples where the public sector is controlled by democratic legislation. The government bodies and thus the public sector is given its mandate from the citizens and is under the democratic control. This is natural, but it also creates a more complex process, with more bureaucracy, stricter regulations, and also reduced willingness to take risks (Natário & Couto, 2022; Olsen, 2018; Rønningen, 2021). Although the public governance is natural, the number of regulations, laws and bureaucracy can reduce the public sector’s ability to be flexible and resilient when procuring. This makes it more complex to implement innovation, due to the increased governance, and these complexities can create an increased threshold to achieve the goal of social innovation. On the other hand, the parliamentary notice “Stat og kommune – styring og samspill” states that the main principal for the government to manage municipalities must be framework management with focus on laws and regulations (Kommunal- og, 2012). This parliamentary notice enables self-governance to the municipalities and provides scope for implementing local measures for achieving social value locally. Meaning that although municipalities are expected to follow the legal framework from the government, the principle of self-governance should allow them ample opportunities for initiative (Kommunal- og, 2012).

2.3.3 Organization of the procurement function

Among scholars and businesses, there is a consensus that the procurement function has a vital role in achieving a company’s strategic goals (Ismail Abdi & Anjela Ewald, 2023; Stormo Andersen et al., 2020). Although, many businesses acknowledge this, it has proven difficult to develop a procurement function with real strategic value. A multitude of challenges arises when developing a procurement function with strategic value. Some of these challenges is the insufficient amount of workforce, and that the workforce is quite mobile and in high demand across both private and public sector (Hopkins & Howe, 2014; Stormo Andersen et al., 2020). To mitigate these challenges Digitaliseringsdirektoratet (DIGDIR) analysed how the public sector could organize their procurement function, to enhance its strategic value (Stormo Andersen et al., 2020). In the report they present a model

(figure 5), which shows distinct ways businesses in the public sector can be organized to develop the procurement function with regards to different orientations. In this two-dimensional space, the vertical organization illustrates the procurement function's relation to the management, with the scale going from random – to a systematic relationship. The horizontal axis illustrates the relationship between the procurement and other departments, with the scale assessing if the relationship is limited or comprehensive (Stormo Andersen et al., 2020).

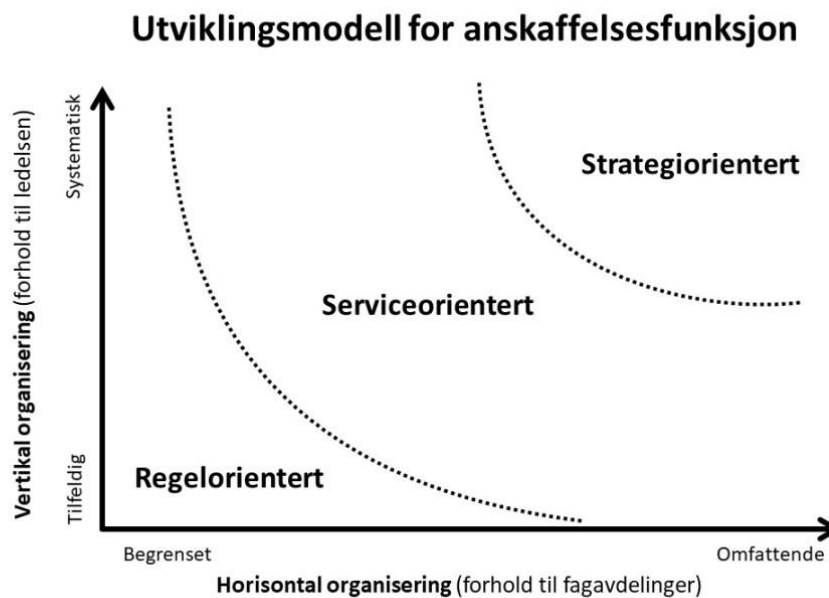


Figure 5 |Development model for the procurement function, showcasing how the different municipalities can evaluate and organize their procurement function, and further develop to reach a more strategic role for the procurement functions.

By addressing and analysing these two conditions, businesses are then divided to three categories, rule oriented, service oriented or strategy oriented. The rule oriented businesses are characterized by having an ad hoc solutions to the demands, focusing more on the rules and legalities and having a higher degree of risk aversion (Stormo Andersen et al., 2020). Stormo Andersen et al. (2020) continues to explain that a rule-oriented business can evolve to a service-oriented business, which are characterized by focusing on being a good supporting function and provide good service to the other departments and the management. These businesses often have strategy – and governance documents from the management, but the management does not monitor the progress towards achieving the associated goals. The next group are the strategy oriented procurement functions, which are characterized by having a holistic responsibility to ensure that the procurement function supports and facilitates the strategic goals of the business (Stormo Andersen et al., 2020). They are tightly

connected to the management and systematically reports to them in accordance with the requirements from the management. Strategy oriented businesses also have a large ability to identify possible innovation opportunities and realizing benefits. By using this model as an analytical tool, which allows a critical discussion of the procurement function in regards to consequences and goals of the enterprise. It can also reveal possible challenges the different municipalities have in their procurement function.

2.4 Achieving social innovation

As previously stated, the main objective for the Norwegian government is to achieve more social innovation. PPaI is an innovation policy tool, due to the large purchasing leverage the public sector has. In this chapter I will present different barriers, shortfalls, and enablers of PPaI. Thus far, we have looked at procurement, innovation, and the public sector separately, but from here on out, we will be discussing these three topics together in the framework established earlier.

2.4.1 Enablers

Natário & Couto (2022) report that innovation is made difficult if certain conditions are not met. Among these conditions are available human resources and their knowledge and attitude towards PPaI (Natário & Couto, 2022), which is also reinforced by the findings of Mwesiumo et al. (2019). The personnel (managers and practitioners) must have a greater understanding of PPaI and a mandate to innovate. In other words, the practitioners could become the main drivers for PPaI if certain conditions are satisfied. There are some internal constraints restricting PPaI, but also a clear potential for achieving innovation. Other drivers like leadership focus and enabling a more innovative friendly environment must also be in place to facilitate PPaI (Demircioglu & Audretsch, 2017; Ek Österberg & Qvist, 2020). Mwesiumo et al. (2019) report that establishing PPaI as part of the organizations strategy, and a clear focus on PPaI from the leadership, are some key enablers. This illustrates that leaders can ensure more innovation if they are aware of the possible benefits of PPaI and possibly achieve employee-driven innovation.

Rønningen (2021) differentiates between certain modes of innovation in his works, such as political innovation and employee-driven innovation (EDI) (Rønningen, 2021, pp. 149-151). EDI is defined as “innovation (new products, processes or services) created by an open and including innovation process, where systematic use of employees ideas, competence and

experience is central to the businesses ability to be innovative” (Rønningen (2021, p. 151)). To understand EDI we must understand that the key to innovation is the employees creativity and problem-solving skills, and that it must be voluntarily from the employees and not be driven by external demands (Yuriev et al., 2022). The first driver for EDI is thus the willingness of the employees to initiate innovation. The drive for EDI is also increased when innovations are put to practice, either it being hypothetical or in small and controlled areas to examine the innovation. This could act as a positive reinforcement which could in principle increase the willingness of the employee to conduct more innovations.

The willingness of employees to innovate can be associated with the culture of the organization. One popular way to asses an organizations culture is to identify creativity and performance through Ekvall`s ten dimensions (Ekvall, 1996). The dimensions being challenge, freedom, idea support, trust/openness, humour and playfulness, dynamics and liveliness, debate, risk taking, idea time, and conflict (Rønningen, 2021, p. 153). These dimensions tell something about the environment of the workplace, individual creativity, and innovation ((Ekvall, 1996). By identifying the level of creativity and performance in an organization, leaders can become more aware of it and foster a more innovation friendly environment, thus ensuring that their employees are willing to innovate. These dimensions can also be seen as drivers for innovation and PPaI. By using Ekvall`s ten dimensions, organizations and the managers of the procurement units can assess what type of innovation culture they have currently, and thereafter identify dimensions where they may need to improve to foster innovation (Ekvall, 1996; Rønningen, 2021). When comparing these dimensions to the 4Ps model and the objective of the parliamentary notice, one could argue that if leaders in Norwegian public sector become more aware of the dimensions, we could have a paradigm innovation, and potentially enable EDI.

Table 1 |Key enablers for achieving innovation.

Enabler	Description
Human resources	Employees who are willing and have the knowledge to innovate
Leadership focus	Advocating and facilitating for innovation in the organization as a leader
Culture	Ensuring an innovation friendly environment
Involvement from strategic level	Policies from strategic level, national capacity and focus on innovation

Description: The table gives an overview of the key enablers to achieve innovation in public sector, with a short description of the named enabler.

Another equally important driver for innovation is the policy makers emphasis on innovation on a strategic level (Mwesiumo et al., 2019; Natário & Couto, 2022). Public leaders need a mandate to conduct innovative procurements, this reduces the need for governance from other higher-ups, as well as reducing required control measures compared to if they were not given the mandate. This shows the importance of the parliamentary notice “a more innovative public sector” and helps implement the objective of social innovations.

To summarize, there are four main enablers for social innovation which is summarized in table 1. The enabling factors illustrate if leaders in different municipalities facilitate for an innovative environment, one can implement and integrate innovation as part of the process while procuring. This is further supported by Natario and Couto (2022) stating that if managers are actively involved in quality improvement and search for innovative ways to manage and provide services, then the conditions for PPAI are met. Furthermore, all the enablers are connected to the first enabler: human recourses. As mentioned by Daglio et al. (2015), people are central to the innovation process in the public sector. All innovation process starts as thoughts and ideas. The personnel must be empowered to act upon these ideas and bring them to life. However, leaders in the public sector manage the societies resources and must thus strike a balance between ensuring enough governance on one hand and encourage change and innovation on the other (OECD). This requires that public leaders stimulate collaboration both internally and externally with other stakeholders, have a clear communicated focus on PPAI (Mwesiumo et al., 2019; Olsen, 2018). Another aspect one must reflect upon, is that all these enablers can potentially become barriers if the public manager is not aware of how these enablers affect the personnel.

2.4.2 Barriers

During the literature review, I have come across different barriers to PPAI. Some are related to organizational barriers, like the paradox of trying to innovate in public sector which is traditionally more rigid and constant, while others are linked to human resources and their attributes, attitude, and behaviour towards innovation, as well as the culture and the leader's ability to promote innovation (Mwesiumo et al., 2019). In this subsection I will present some key findings and discussing how this affects the objective of SI.

As previously mentioned, one of the government's main funding sources are taxes, with this follows the taxpayers' expectations that the money should be spent efficiently towards achieving social value. These expectations create a need for governance units, which leads to increased numbers of reports and thereby increased bureaucracy. The increased bureaucracy can become a barrier for procuring units, where the context of public sector and expectations from the taxpayers can increase the use of risk averse and established methods/models for procurement (Demircioglu & Audretsch, 2017; Natário & Couto, 2022; Olsen, 2018). The personnel are resistant to try new methods or to innovate due to the risk of either economic loss or more bureaucratic work such as reports to higher echelons. This again reinforces the findings of Mwesiumo et al. (2019), who state that innovation has to have a clear and strong mandate in the organization in order to facilitate for practitioners to innovate. Although conflict is listed as one of the 12 dimensions in Rønningens' work, it must be stated that this is a clear barrier. When conflict exists in a workplace it can increase tension, reduce trust, risk taking and other dimensions (Rønningen, 2021). Conflict can also be linked to increased risk aversion and thereby reduced innovation. However, awareness of this dimension and continuous assessments of the work environment can perhaps reduce its effects on productivity and innovation.

Additionally, another barrier that could manifest itself is the personnel's attitude and behaviour towards innovation (Demircioglu & Audretsch, 2017; Natário & Couto, 2022; Rolfstam et al., 2011). As earlier mentioned, the human resources, with their knowledge, attitude and behaviour can be a formidable enabler for both EDI, and process innovation, they can likewise become a real barrier for implementing innovation. Mwesiumo et al. (2019) found that many public purchasers do not fully understand the terms and definitions used by external parties, e.g., LUP, on innovative procurement and this again points out how

the personnel's knowledge on innovation can be a barrier for achieving social innovation. With lacking information and knowledge about innovation this can increase the threshold, and colour the personnel's attitude and behaviour.

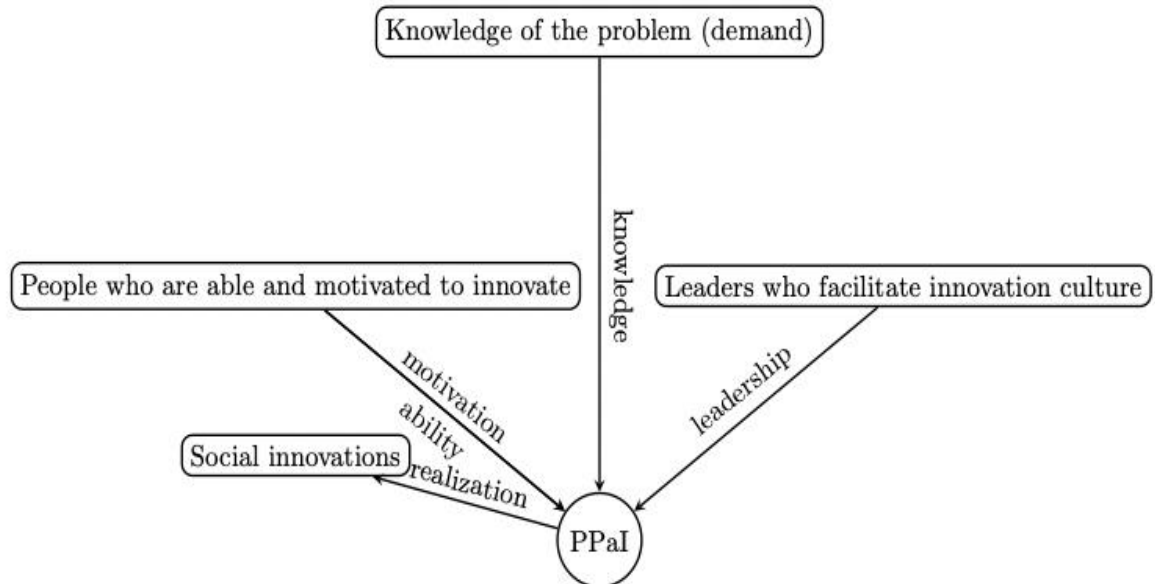


Figure 6 | Enablers affecting PPaI and the relation to social innovation. Key enablers allow public sector to integrate innovation while procuring, which ultimately realizes the objectives of social innovation.

In summary, there are several important drivers and barriers for PPaI revealed by the literature review. Figure 6 shows how the different enablers act towards PPaI and how one can use PPaI as a tool to reach the expressed objectives of social innovations. Paradoxically, during my literature review, I have seen that many of the enablers, like leadership, knowledge and motivation can also become barriers to implementing and integrating innovation as a key principle in PPaI. The different aspects of the barriers and drivers will be used as discussion points during the interviews of the practitioners, to elucidate whether these are still valid, and whether they believe one could mitigate the negative consequences and reinforce positive advantages. Discussing this with the practitioners might also change their attitude towards PPaI. Additionally, by discussing workplace factors, individual creativity, and innovation, one might produce a large amount of data. The literature review will be used to produce interview guides and discussion points.

3.0 Methodology

This chapter will go through the different methodical choices for this study, to do this I will present the research onion (Saunders et al., 2009) and the seven phases in a qualitative research (Jacobsen, 2015). The research onion presents layers regarding the different methodological choices a researcher must take and justify these choices. This chapter will present the six different layers: 1) research philosophy, 2) approach, 3) design, 4) strategy, 5) time-horizon, 6) techniques and procedures.

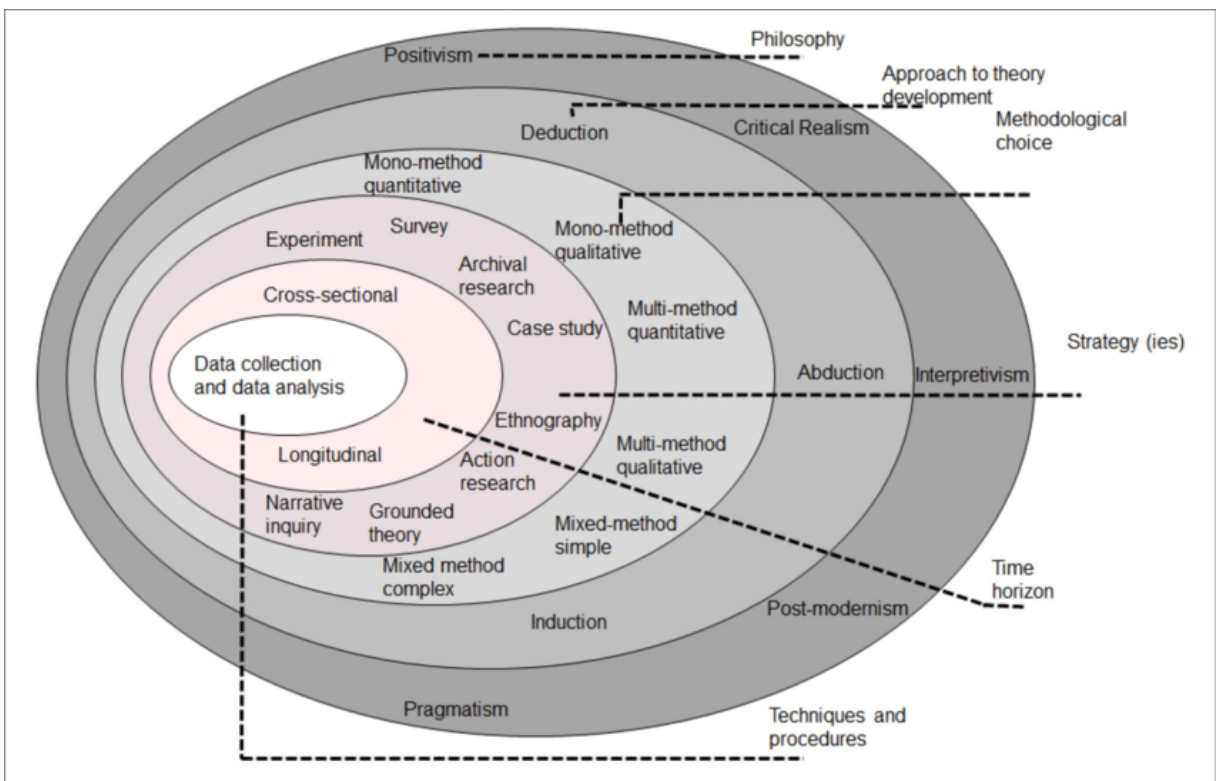


Figure 7 | *The research onion*. A model for designing research methodology, consisting six layers: 1) research philosophy, 2) approach, 3) design, 4) strategy, 5) time-horizon, 6) techniques and procedures (Saunders et al., 2009).

3.1 Research philosophy

The very first layer of the onion is the research philosophy. According to Saunders et al. (2009), research philosophy forms the outline of the research, and how the researcher is developing new knowledge through the research they are conducting. Furthermore, the philosophy of a study contains important assumptions about how the researcher views the world. Saunders et al. (2009) claims there are mainly five philosophies: 1) Positivism, 2) Critical Realism, 3) Interpretivism, 4) Post-modernism, and 5) pragmatism. For this thesis I have taken an interpretivism approach. Interpretivism emphasises on the influence social

and cultural factors have on the individual, this philosophy focuses on people thought and ideas (Saunders et al., 2009). Retracking to the research topic, innovation, and the personnel it is affecting, interpretivism was a natural choice for me.

3.2 Research approach

The next layer of the onion is the approach to the research. Generally, there are three research approaches, 1) Deduction, 2) Abduction, and 3) Induction. Deductive approaches often start with a specific hypothesis development based on the literature review conducted by the researcher. Furthermore, the researcher gradually tries to test this hypothesis and falsify it. While inductive approach involves moving from specific observations to more general observations (Jacobsen, 2015; Saunders et al., 2009). For this thesis the inductive approach was used, due my observations from own work experience and the motivation to explore other instances.

3.3 Research design

Research design is the researchers overall plan to conduct the research. In this subsection I will present the research design, firstly introducing the research questions, and then follow each phase as depicted in figure 8.

3.3.1 Methodological choices

When the research has chosen the research philosophy and approach the researcher must choose the methods the research wants to apply. There are three main categories: 1) quantitative, 2) qualitative, and 3) mixed method. The main differences between the methods are how the data is collected and analysed to answer the research question (Jacobsen, 2015). Quantitative method focuses on using numerical values as data, and often uses statistics to draw conclusions that can be generalized to a larger population. Some of the characteristics of quantitative research is having a clear hypothesis and predicting the outcome, as well as large sample sizes and statistical methods.

Qualitative methods on the other hand focuses more on understanding different and complex situations by collecting and analysing non-numerical data. The data collection is through the means of interviews, observations, and focus groups. These methods are fitting when the aim is a deeper understanding of a phenomena and the conclusions are often specific to the

research and not as generalizable as with quantitative methods (Tjora, 2017). Mixed method combines both quantitative and qualitative data to draw conclusions. This type of method is more demanding but allows for a more comprehensive understanding of the subject (Jacobsen, 2015).

The process of conducting qualitative research can be divided in to seven different phases (Jacobsen, 2015), which are translated and depicted in figure 8. The purpose of this chapter is to provide a comprehensive and detailed representation of the research process to establish reliability and verifiability of this study. Retracing to the approach and philosophy of the study a qualitative approach was the correct choice for this study.



Figure 8 / The phases of qualitative research (derived from Jacobsen (2015, pp. 63-65)). The process starts by formulating a research question. Then, moves on to creating a research design, understanding the data type produced, planning data collection, with the correlating activity of selecting units to collect the data from, as well as analysing the data and assessing the data reliability and validity. At last, the data must be interpreted, presented, and discussed.

3.3.2 The research strategy

All research depends on a clear research question, hypothesis or aim, which constitutes the core of the research (Tjora, 2017). This defines what the researchers want to investigate and what they seek to answer while conducting the research project, the research question sets the tone for the entire process. Creating a research question is not a linear process, it is often

dynamic, and changes along the way (Jacobsen, 2015). The research question sets conditions for the research, from determining whether it should employ a qualitative or quantitative approach to data collection and analysis. As a reminder, the research questions of this thesis are:

How do managers in the Norwegian municipalities integrate innovation as a principle in the public procurement process?

Is there room and facilitation for managers to innovate the processes, and what are their thoughts on political and managerial initiative to innovate in the procurement processes?

The research question(s) of a study is dictated by the philosophical framework of the research. Examining the research questions we can see that they mainly focuses on “how” and “what” – which dictates a more explanatory focus and often leads to case studies (Yin, 2018). The phenomenon that ties the different municipalities together is “innovation”, therefor it acts as the conceptual infrastructure for the study. As we see from the research question, I aim to explore the experiences and perspective of practitioners and managers of public procurement. This type of research questions often implements qualitative methods and can be viewed as exploratory studies which seeks a deeper understanding of a situation (Tjora, 2017). The data collected in this research are words, feelings, experiences, and thoughts about the subject of innovation in public procurement. The next chapter will focus on the strategy and case description of the study. This will allow the reader to understand how the collection and.

3.3.3 Case description

This study is an exploratory study to understand how innovation has affected public procurement processes in Norway with a cross-sectional time horizon. Multiple research units from different municipalities helped answer the research questions. This kind of research can be described as a multiple case study. Multiple case studies are used when the research question demands wider perspective, and the phenomenon that is being researched can be observed in multiple contexts (Stake, 2013; Tjora, 2017). Each one of the municipalities can arguably be viewed as an individual case, but I divided it to 3 categories,

small, medium, and large municipalities according to their population sizes. This categorization helps us understand the differences between the municipalities and if sizes affect each category (Table 2). There are no official definitions of small, medium, large municipalities in Norway. However, Statistisk sentralbyrå (SSB), have proposed the sizes described in table 2 as values to categorise the different municipalities in Norway (Marit et al., 2020). Therefore I have used the same values for my research.

Table 2 | **Categorization of different municipalities**

Category	Population sizes
Large	>30 000
Medium	10 000<30 000
Small	<10 000

Description: Shows the three different categories that the municipalities have been divided to and the population sizes.

Figure 8 shows the three categories and the population sizes. This chapter will describe each category to help understand the study and the municipalities, giving the reader a framework to place the study to.

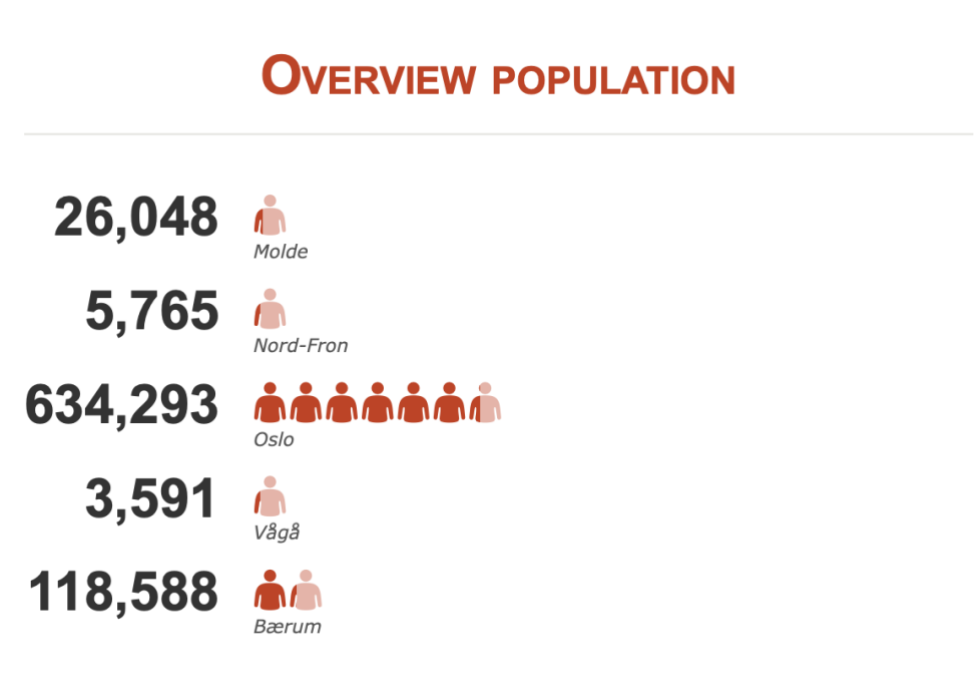


Figure 9 | An overview of population sizes. The figure shows the exact number of residents in the different municipalities.

3.3.3.1 Category 1: The small municipalities

There are two municipalities in this category: Vågå and Nord-Fron. Both municipalities are located in Innlandet county with 3591 and 5765 citizens respectively. Nord-Fron municipality consists of three urban areas, Vinstra, Kvam and Skåbu, and the main industries are hydroelectric power, trade industry and agriculture (Trond Olav, 2005-2007). Vågå consists of two urban areas, Vågåmo and Lalm. Their main industry is agriculture, and utilization of local raw materials, like sawmill and planingmill, furniture and workshop industry (Thorsnæs, 2023). These municipalities are quite similar in terms of population, industry, and culture. Therefore, they were placed in the same category.

3.3.3.2 Category 2: The medium-sized municipality

There is only one municipality in this category, and this is Molde. Molde municipality is in the county of Møre og Romsdal, with a total population of 26 048. Molde consists of multiple urban areas, with the administration centre in Molde town, which is also the county centre. The main industries in the municipality are trade and service industry, metal industry and hydroelectric power. However, a large portion of the working force (approximately nine percent) are employees in the public sector (Stokkan et al., 2023).

3.3.3.3 Category 3: The large-sized municipality

This category consists of two municipalities, Oslo and Bærum. Oslo is the largest municipality, and the capital of Norway, with over 600 000 citizens. In terms of businesses Oslo provides many services, such as trade of goods, transport, banking, and insurance. Oslo plays a vital role in the value creation nationally, with a surplus of suppliers, jobseekers and employment (Thorsnæs, 2019). Bærum is in the Norwegian context a rather large municipality with over 100 000 citizens. Bærum has a strong and diverse economy, and there are numerous businesses from different markets located there. Amongst them technology companies, financial, and other industries (Thorsnæs & Askheim, 2023). Due to size these municipalities are placed in the same category.

3.3.3.4 How are the procurement functions organized?

The five municipalities organize their procurement function in different ways. One of the solutions is centralized units with responsibility to conduct all sector-wide procurements, while other municipalities have a mixture of centralized and decentralized units, and others have intermunicipal cooperation with other neighbouring municipalities. How they have

organized their procurement functions have also affected the integration of PPAI (further discussed in chapter 5). Table 3 shows and summarizes the procurement functions of each municipality.

Table 3 | **Organizing the procurement functions across the categories.**

Municipality	Organization method	Description
<i>Oslo</i>	<i>Mixed method; both decentralized and centralized</i>	<i>Oslo has both a centralized unit with the responsibility to conduct sector-wide procurements, but also have procurement units in many sectors who, e.g., a procurement unit in urban environment agency.</i>
<i>Bærum</i>	<i>Centralized</i>	<i>Bærum has a centralized unit who conduct most of procurements done by Bærum, except for the construction agency.</i>
<i>Molde</i>	<i>Centralized, intermunicipal cooperation</i>	<i>Intermunicipal cooperation with three other municipalities</i>
<i>Vågå</i>	<i>Centralized, intermunicipal cooperation</i>	<i>Intermunicipal cooperation with six other municipalities</i>
<i>Nord-Fron</i>	<i>Centralized unit</i>	<i>Nord-Fron has a unit for procurement as part of their municipal council, but to date the section has no purchasing employee.</i>

Description: The five different municipalities have organized their procurement function in many different methods. The table gives a short description of each municipality way of organizing their procurement functions.

3.3.4 Data collection

Now that I have presented the case, we will move on the fourth phase in qualitative research: data collection. This process involves understanding the type of data needed as well as planning the collection of information to help answer the research question (Jacobsen, 2015). For researchers using qualitative method there are some common ways to gather information, these are interviews, observations, focus groups and document analysis (Tjora, 2017). During this project, I have conducted interviews with respondents to identify and analyse how, and if, innovation has been implemented in the public procurement process. The interviews produced a large amount of first-hand data, which was later analysed. During the process of planning the data collection, I found that virtual interviews would be the best course of action due to two main factors, 1) the geographic dispersion of myself and the

respondents, and 2) the lack of resources (time and money) to conduct face-to-face interviews. Virtual interviews gave me increased flexibility, all the while making the data collection more effective and efficient. After deciding the data collection method, I worked out the structure of the interviews and established an interview guide.

There are three categories on how an interview could be conducted: structured, semi-structured or unstructured. Structured interviews follow a fixed set of questions that are prepared previously. While unstructured interviews are without the existence of an interview guide and has only sequences in the interview. Semi-structured interviews are the mid-way combination of the first two. Jacobsen (2015) makes a valid point that structuring should be seen a moving scale, rather than either-or. During this research, I chose to utilize a semi-structured interview to ensure that the themes I have encountered in the literature review were discussed with the respondents. But a semi-structured approach also allowed me to grasp opportunities when the respondents themselves wanted to bring up themes and discussion points. The semi-structured interviews gave flexibility and room for thoughts/digressions, that potentially would not be possible with a structured interview. The next step of the process was establishing an interview guide (Annex B – Interview guide). The interview guide took inspiration from the literature review to ensure that the themes from the literature review was discussed, all the while allowing the respondents to explore their own thoughts and examine their feelings.

3.3.5 Recruiting and selecting participants

The process of recruiting and selecting participants (respondents) for a study can be quite complex and time consuming. To simplify this process one can divide it to three steps: 1) identifying the population, 2) selecting and recruiting the units, and 3) conducting the interviews. I started by listing all potential candidates, and for this research it included all municipalities in Norway. Given the time limit, it was not possible to recruit all municipalities for this project, which meant that I had to establish criteria for selecting respondents. After discussing with my supervisor, I choose to sample the units with regards to municipality sizes, which would allow me to get a cross section of the potential candidates. During the recruitment process, I established both “Samtykkeskjema” (Annex A) and the interview guide (Annex B). The informed consent to participate in this study was obtained through e-mail, sent to the different municipalities together with the interview guide. As we can see from table 3, a mix of both practitioners and managers were

interviewed during this study. There are also some clear differences in the sizes of the municipalities with regards to population. These two elements give the study a width in the data that was collected. The interviews were conducted on Teams and voice-recorded to ensure correctness when transcribing the interviews within the guidelines regarding privacy given by the NSD (NSD 418648). The process of recruiting respondents was more tasking than anticipated, but nevertheless I assume that this group of respondents have contributed to illuminating different aspects of the research question.

Table 4 | **The respondents in this study**

Code	Job title	Municipality	Population	Category
R1	Sjef for anskaffelsesenheden	Bærum	118 588	Large
R2	Innkjøpsrådgiver Utviklings- og kompetanseetaten (UKE)	Oslo	634 293	Large
R3	Innkjøpsleder	Vågå	3591	Small
R4	Innkjøpsmedarbeider	Vågå	3591	Small
R5	Tjenesteleder for anskaffelser	Nord-Fron	5765	Small
R6	Innkjøpsleder UKE	Oslo	118 588	Large
R7	Innkjøpsleder	Molde	26048	Medium

Description: The table shows the different job titles of the respondents that were interviewed during this study and the codes they are given to help anonymize them.

3.3.6 Data analysis

Data analysis is about transforming the raw data obtained during the interviews to a structured framework that allows analysis and interpretation, giving the researcher the ability to extract and present their findings (Tjora, 2017). This subchapter will present the data analysis conducted during this project. A total of 7 interviews were conducted. As earlier mentioned, the interviews were conducted virtually by using the platform, Microsoft Teams. By using Teams, I was able to video chat with the respondents as well as having the ability to voice-record so that I could transcribe the interviews shortly after conducting them. During the interviews I also had a pen and paper available to write down notes and comments. In total, the interviews amounted to approximately 35 000 words after transcribing them, while the notes totalled to about 10 pages.

Jacobsen (2015) explains that qualitative research is partly about how a researcher can divide texts to smaller components (e.g., words and paragraphs), and afterwards reconnect these components to have a revised understanding of the whole. This method is called the hermeneutic method, which is used to analyse the data in this study. The hermeneutic method consists of mainly four activities: documenting, examining, systematizing/categorizing, and lastly reconnecting the text.

The process of documenting is to establish raw data and make them available. In this instance, the raw data is the transcriptions, comments, and notes that were taken during the interviews. When the raw data is available, one can start examining the data in a process called text mining. Text mining is the first step to understanding the essence of a text. I performed this process manually by reading through the transcripts and writing a summary for each interview. This process was followed by examining paragraphs and sections of each interview and attempting to categorize them in different codes, while also making different annotations along the coding. This process is called a content analysis, where the researcher analyses the text in the context of the research, and then tries to uncover patterns or themes (Jacobsen, 2015). The patterns are then systematically divided to codes, and from these codes the researcher can categorize the data to even larger themes or categories. Figure 9 shows how the data coding in this study was conducted. Every transcription was coded individually and then cross-analysed. The cross-case analysis helps the researcher find patterns and commonalities across the different individual cases (Stake, 2013). This resulted in the findings that were common across all groups, but also peculiarities that was unique with regards to the groups. The latter analysis resulted in four recurrent themes: 1) Human capital, 2) Leadership and organization, 3) Processes and tools, and 4) Culture and values. This process is called a two-step coding process with focus on content.

Each of these thematic categories were created by grouping the similar codes together under broader terms, for example the codes “attitude and behaviour” was placed under the category of “Culture and values”. This allows a systematic extraction of meaning from the different transcriptions, as well as enabling easier communication of the findings (Tjora, 2017).

Codes	Interviews
<p>Background:</p> <ul style="list-style-type: none"> - Leverandør utviklingsprogrammet - Experiences - Laws - Communication with the market - Attitude and behavior - Changes in public procurement 	<p>I: Kunne du starte litt med å fortelle litt om deg selv og hvor lenge du har jobbet med innkjøp, anskaffelser og innovasjon?</p> <p>R1: Og jeg er tjenesteleder for anskaffelsesenheten i Bærum kommune. Det er vel si at det er på en måte er litt sånn, anskaffelsessjef i Bærum kommune. Der har jeg jobbet i 9 år i denne stillingen. Hmm. Og jeg leder en sentral anskaffelses enhet på 18 personer. Ja, det kommer vi sikkert litt mer tilbake til. For øvrig så kan jeg jo si at jeg har jobbet med anskaffelser mer og mindre i 35 år.</p> <p>Hmm. Jeg startet med egentlig anskaffelser veldig, veldig tidlig. Min egen yrkeskarriere, og i og med at jeg begynner å bli gammel, så begynner du å begynne når. Så tilbake til rundt 1999 starter jeg med offentlige anskaffelser. Jeg har jobbet i kystdirektoratet. Jeg har jobbet i nav direktoratet, da arbeids og velferdsdirektoratet. Hmm og jeg har jobba i bravida og Telenor med anskaffelser.</p> <p>Innovasjon i offentlige anskaffelser kom jeg borti for første gang når leverandør utviklingsprogrammet startet opp. Ja årstallet husker jeg vel antagelig ikke, men det er vel en 12 år siden eller noe sånt? Hmm den gangen jobbet jeg i nav og leder for den hjelpemiddel anskaffelser i nav den gangen. Og da bestemte vi oss for å bli med på det arbeidet til leverandør utviklingsprogrammet nettopp for å utforske det såkalte mulighetsrommet i forhold til innovasjon. Ja, det var veldig mye skeptisk, den gang skeptisk i forhold til hvor mye kunne du egentlig prate med leverandørene og så videre? Det det bunnet litt i den der. Inngrodde skepsisen som man hadde i forhold til å ha kommunikasjon med leverandørmarkedet i offentlige anskaffelser.</p> <p>I: kjempeinteressant at du nevner det med skepsis. Var det usikkerhet rundt regelverk eller var det andre ting som økte den?</p>

Figure 10 | The process of data coding. The colours are correlated with the different codes. By doing this process the researcher can become aware of patterns, meanings, and themes in the text. The codes are the fundament of creating categories of the data that is later presented as findings.

All municipalities were analysed separately. The next natural phase of qualitative research studies is the presentation of the different patterns and themes – and draw conclusions from them. In chapter 5 I will present the conclusions from the data analysis, however, to assert the findings I will discuss the validity and reliability of the study in the following paragraphs.

3.4 Validity and reliability

Before disseminating the findings of a study, a researcher should always try to mitigate the problems with validity and reliability when conducting research (Tjora, 2017). The question a researcher must ask is: how reliable and valid are the conclusion we have drawn from our

study? To be able to answer this, the researcher must have a critical view of the methodological choices taken in the study. Validity is in other words how precise and dependable the conclusions are. The aim of this chapter is to explain why this study is valid and reliable, and what actions I have taken to ensure that problems with validity and reliability are mitigated.

3.4.1 Internal validity

Internal validity is the process of assessing if the results of the study will be considered valid by the readers of the study (Jacobsen, 2015). This is done by assessing whether the descriptions in the study are true or false, and the patterns and context are truly a real representation of reality. Jacobsen (2015) explains the following process as validation. It consists of 3-steps (Figure 10); the first step is to assess if the respondents have actually given a real representation of the reality, the second step is to assess the researchers ability to reproduce and interpret the representation given from the respondents and lastly if the conclusions that the researcher has drawn actually represent reality (Jacobsen, 2015, p. 228).

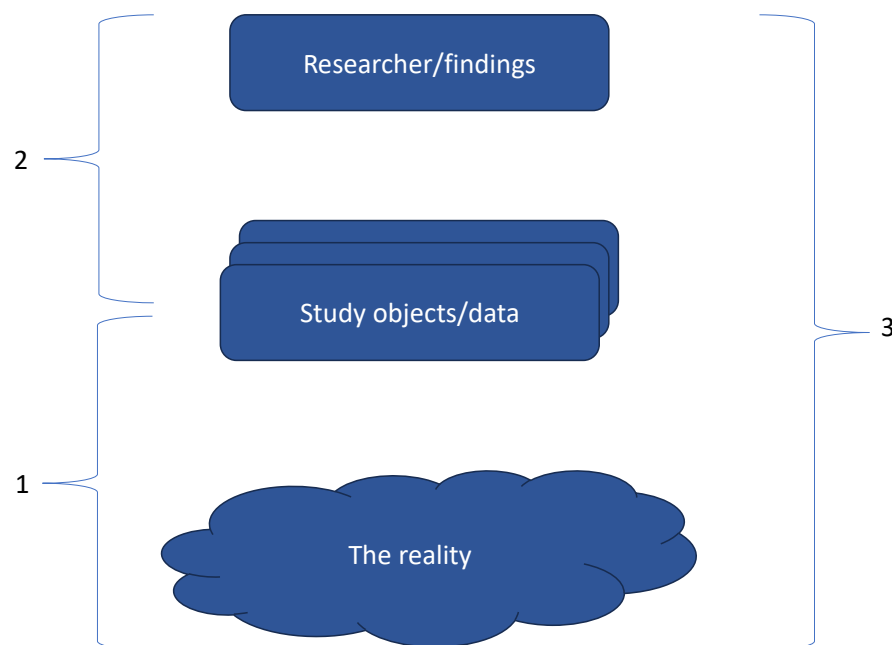


Figure 11 | *Validation – is this true or false?* The process of validation can be explained in three steps. 1) Have the respondents given a real representation of the reality? 2) Has the researcher been able to interpret the data correctly? 3) Is the data represented correctly and without biases. (Jacobsen, 2015)

The respondents in this study are all either managers or practitioners of public procurement in different Norwegian municipalities. And given the aim of this research it was critical to have the right respondents who could give insights to the how different municipalities conduct the procurement process – and how one can integrate innovation. I assume that the respondents recruited are relevant personnel to describe reality of PPAI. If I had more time during the research, I would recruit additional municipalities to participate to get an even more detailed description of PPAI. Another factor that must be assessed when considering the internal validation of a study is how the researchers own bias, and perceptions can influence the study (Jacobsen, 2015, p. 233). This was something that I was very attentive of during the process, and concrete measures were taken to mitigate this risk. First of all, I implemented respondent validation, which is a process of confronting the respondents with findings to ensure that the respondents can recognize the topics (Jacobsen, 2015). I presented quotes to the respondents that was going to be used in the thesis, as well as sending them the whole results chapter, to ensure that they recognized the findings. I find the above measures to be sufficient to reduce my own biases and perceptions. Concluding the assessment of the study's internal validation: I firmly assume that the study is a true representation of PPAI in these Norwegian municipalities.

3.4.2 External validity

While internal validity is the process of evaluating if the findings are true representation of the phenomenon, external validity is the process of assessing if the findings can be generalized to other cases or other parts of the world. External validity is dependent on two factors, the number of participants and how they were selected (Jacobsen, 2015). I interviewed a total of 7 respondents during this study. Considering that the aim of this research was to illuminate one phenomenon from different perspectives and compare different cases to each other, I assume that this study can be generalized to other cases in the Norwegian public sector, or more specifically to municipalities of comparable sizes. There are many similarities considering the study groups – small, medium, and large municipalities. To increase the external validity, an attempted to recruit more municipalities could have been made, yet I was quite certain that I had reached a saturation in the process after the last interview. With this, it could be argued that the number of respondents is sufficient to shed light on the phenomenon – more respondents would not necessarily increase the external validity.

The other factor that influences is the process of selecting study participants. Jacobsen (2015) explains that there are typically three selection types, the typical selection, spread and least likely respondents. For this process the criteria were based on the typical selection, choosing respondents (municipalities) that represents typical municipalities. For instance, in the group “large” – this could have been Oslo, Bergen or Trondheim, all are typical large municipalities in Norway. It was necessary for smaller and medium-sized municipalities to be included in the survey to ensure a spread among the respondents. By focusing both on spread and typical selection I have increased the external validity. One could argue that the findings concerning smaller municipalities can be generalized to other similar sized municipalities. On the other hand, all municipalities have their own unique characteristics – implicating that the findings from this study cannot fully be generalized to other cases. Especially considering that the study is focused on the respondents view of the phenomenon. In conclusion, there are details, categories and findings that cannot be generalized to other cases, but the study can be easily replicated to examine other municipalities.

3.4.3 Reliability

There are many factors that can affect the outcomes of a study. This could be how the research is designed, how the interviews were conducted or how the analysis was performed. The list is not exhaustively, merely some examples to factors that can affect the reliability of a study. In this subchapter I will critically appraise some of the factors that could have affected the outcomes of the study.

Jacobsen (2015) explains that there are several factors that can influence the study, the examiner effect, the context effect, and carelessness in the gathering and analysis of the data. The examiner effect is about recognizing that data gathered is influenced by the interviewer and the interviewee, the flow of the dialogue and the trust between the two parts will influence the data that is gathered. In other word every interview setting is unique with its own peculiarities, but the use of an interview guide helps mitigate some of the risk of examiner effect. The interview guide ensures that I, at least, went through all the categories that I came across in the literature review with all the respondents.

Another factor is the context effect, where and how is the interview conducted? As earlier mentioned, the interviews were done virtually. Virtual interviews have some clear limitations. The interviewer and the interviewee are physically apart, the interviewer cannot

observe the interviewees body language and the context could feel artificially for the interviewee (Tjora, 2017). Although this is true, the benefits are also quite formidable. For instance, it is more cost effective and gives the interviewer increased flexibility. The advantages and disadvantages were weighed against each other, and given the increased flexibility, the advantages outweighed the drawbacks.

Lastly Jacobsen (2015) explain that the biggest threat to a study's reliability is the researcher's carelessness. Conducting and writing a thesis is a tasking process, and the researchers' ability to comprehend important details, patterns, and categories can easily be affected. This was a risk that I was aware of from the beginning process, yet I can acknowledge that some parts of the process could have been affected by me being exhausted during the interviews, or sloppiness while analysing the data. To mitigate the risk, I had planned the transcription process and analysis of the data before I began collecting it. By having voice recordings of the interviews, I could transcribe every interview word-for-word. The transcriptions were completed shortly after the interviews to minimize the loss of non-verbal cues and impressions from the interview. To conclude, the research study is not perfect and there are possibly factors that could have affected the study. However, by discussing and being transparent about these factors, it allows for the study to be replicated with other cases.

3.4.4 Ethical considerations

While conducting this study there were multiple times, I had to review the choices taken – especially considering the ethical aspects. As mentioned, I had voice recordings of the interviews. This gave me a flexibility and increased my ability to transcribe correctly, however a videorecording could have given a lot more because it would allow for the non-verbal communication from the respondents to be analysed later as well. This could have even increased the reliability of the study, but also the examiner effect. Anonymization of the respondents is another factor that might have reduced the internal validity. The readers do not know who the respondents are and will thus not be able to critically assess if they are the right sources to explain how innovation has been integrated in public procurement. However, considering that some of the respondents work with procurements in municipalities where one can easily access name and other information, it was important for me to anonymize as much as possible considering the respondents right to privacy. On the other hand, it is important to mention that some respondents may be indirectly identified due

to job title and municipality being presented in this study. This is also reported to NSD, who has assessed that this is in accordance with the legal framework. Therefore, it was important for me that respondents had access to transcriptions (if they wanted it) and that all citations were approved by the respondent. The measures taken during this research was taken to ensure a correct treatment of data and ensuring the respondents right to privacy.

3.5 Summary

To summarize this chapter, I have presented the methodological choices conducted in this study. Subsequently, I have shared the ethical considerations, discussed validity and reliability to be as transparent as possible and allow the study to be replicated. Qualitative method, with a case study, has been the core for the study, with in-depth interviews being the primary data source. The data gathered during the interviews were then analysed through a hermeneutic process with focus on the content. The findings from the analysis will be presented in the next chapters with the use of quotes from the respondents in a “show and tell” manner. Figure 11 shows the methodical choices of this study.

The research onion	Methodology
Research philosophy	Interpretivism
Research approach	Inductive
Research design	Case study
Research strategy	Mono qualitative method
Time-horizon	Cross-sectional
Techniques and procedures	Data gathering: Semi-structured interview Data analysis: Content analysis Data presentation: “Show and tell”

Figure 12 | Summary of methodological choices. The summary gives a snapshot of the different methodological choices I have taken during this research.

4.0 Findings

In this chapter, I will present the findings of the study. As previously mentioned, I will employ a "show and tell" (Yin, 2018) method where I will present various quotes from respondents to illustrate and substantiate different findings. I have examined the various interviews with regards to the literature analysis, and attempted to show what the situation is in the three size categories. As previously mentioned, the different data codes resulted in 4 distinct themes: 1) Human capital, 2) Leadership and organization, 3) Processes and tools, and 4) Culture and values. Looking through these themes in each interview, and cross analysing the data, revealed four key findings consistent across the three categories:

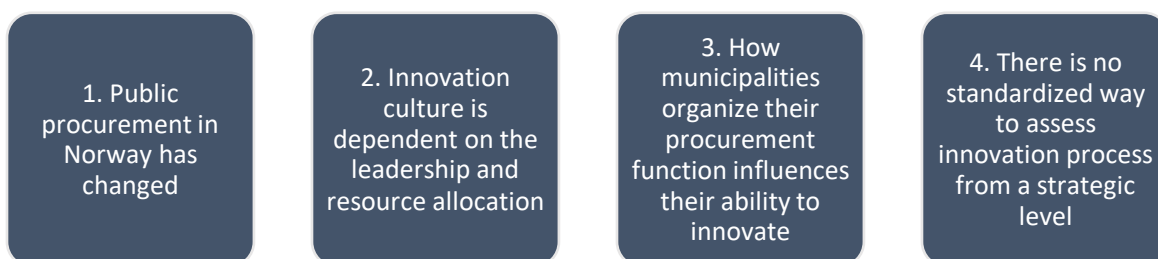


Figure 13 | The four key findings of the study. The study shows that public procurement is changing in Norway, the respondents are reporting a better process all over, which allows for more process innovation. Furthermore, establishing an innovation friendly culture is dependent on how leaders allocate resources. However, the method to organize can affect their ability to innovate and lastly the lack of standardized way to assess innovation is a key barrier.

In the following subsections I will present these findings, and then go on to explain important differences between the groups, as well as explore enablers and barriers that are present in the different categories.

4.1 Public procurement in Norway is changing

During the interview of the larger municipalities, the practitioners were exceedingly focused on the development of public procurement, and devoted large parts of the interview to discuss how the ongoing maturation of the field has helped them become more innovative while procuring. Respondents from the smaller municipalities have also observed a shift in the focus on how public procurements should be conducted, but the effects are smaller.

Nevertheless, the respondents agreed that public procurement is developing, and that this development can be considered a pre-condition for implementing innovation.

Group	Quote	Respondent
Large	<i>“Det er vel det at jeg på en måte har vært med på den utviklingen som har skjedd innenfor offentlige anskaffelser de siste 30 årene, og det det er en ganske stor og lang reise.”</i>	<i>(Respondent Bærum, 2023)</i>
Large	<i>“Fra jeg begynte å jobbe med offentlige anskaffelser tidlig på 2000- tallet, så har det vært en betydelig utvikling av det faget [...]”</i>	<i>(Respondent Oslo, 2023)</i>

The above quotes illustrate that respondents are quite certain that public procurement in Norway has changed during the last decades. This is an interesting topic which showcases that public procurement in Norway is developing. But what exactly does these changes entail? The respondent from Oslo believes there has been three distinct shifts within the field. These concern the introduction of legislative regulation of public procurement, a focus on capitalizing benefits through contract follow-up and facilitation and finally all the while adapting as consumers of procurement. Another respondent confirms that there has been a gradual change and maturation of the field for the past years, both concerning policies as well as being allowed to explore the boundaries of the policies.

Group	Quote	Respondent
Large	<i>“[...] Så det har skjedd en sånn modning gjennom noen år da. Det at vi må jo slutte med å jobbe på den måten vi gjorde. Og at regelverket kun er noen rammebetingelser. De er riktignok viktige, og de skal vi holde oss innenfor. Men det å dytte litt på de rammene og sjekke ut mulighetene må man. Man skal ikke være så livende redd for å utforske de rammene litt og tøye dem litt [...]”</i>	<i>(Respondent Bærum, 2023)</i>

Large	«Så det har vært litt sånn, blir kanskje litt feil å bruke ordet paradigme, men det har vært tre tydelige skifter. Ett skifte hvor regelverk var det viktigste, så dette med avtaleoppfølging og tilrettelegging for at vi får realisert gevinstene, mot at vi nå har fokus på hvordan vi kan endre kommunen som forbruker og konsument. For hvert paradigmeskifte, så er det som har vært fokus før skiftet noe som fortsatt er viktig, men noe som blir tatt for gitt at er til stede.»	(Respondent Oslo, 2023)
Medium	«Selvfølgelig, altså for det første så har kompetansenivået økt betraktelig. Dersom man sammenligner sertifiseringskursene i dag med når jeg tok de, er det mer profesjonelle nå. Foreleserne er flinkere, man går gjennom hele bredden av anskaffelsesregelverket, vi ser at man tar i bruk flere verktøy for å gjennomføre anskaffelser, både konkurransegjennomføringsverktøy og administrasjonsverktøy for å administrere rammeavtaler.»	(Respondent Molde, 2023)

These changes are according to many of the respondents also visible in the supplier markets with more professional suppliers with an extensive knowledge of legal framework of public procurements. One of the respondents reflected upon how development in the supplier market forced development in the procurement function of their municipality. By seeing and understanding the changes that public procurement has undergone, one can better understand how innovation can be integrated to it.

Group	Quote	Respondent
Medium	“[...] Altså markedet har utviklet seg blir mer profesjonelt. Du fikk inn flere klager, for eksempel hvis du ikke hadde gjennomført en prosess skikkelig, og da så man det som formålstjenlig å ha et kompetansemiljø etablert, fremfor å være på etterskudd hele tiden.”	(Respondent Molde, 2023)

To summarize, we appreciate that the changes are due to a larger understanding of the process of public procurement. By gaining an understanding of the legal ramifications of

public procurements and focusing on doing the process correctly, the respondents report that they gain a richer understanding of the possibilities of in the Norwegian law, *Loven om offentlige anskaffelser*. According to the respondents, this has helped reduce the need for governance and contributed to easier focus on innovation in the procurement processes. Some of the respondents see this as a necessary development to be able to implement PPAI in their municipalities.

4.2 Resource allocation – a barrier or a driver?

To understand how one should integrate innovation as a principle for managers they were asked several questions about how leaders in public sector can facilitate for innovation in the procurement process. A common theme across the cases was that a profound understanding of the procurement process in public sector, legal framework and a clear mandate from a strategic level must be in place. But most important, public leaders must understand that if innovation is to be prioritized, one must focus on making it a part of the procurement culture, while also allocating specific resources to work purposefully towards innovation in these processes. If a public leader disregards the resources that are needed to implement PPAI it will not be successful, regardless of strategies and mandates.

<i>Group</i>	<i>Quote</i>	<i>Respondent</i>
Small	«Nei, jeg sitter med det inntrykket at hvis vi skal bruke tid på det så må vi ha kapasitet til å bruke tid på det. Vi må ha kapasitet til å sette oss inn i de tingene, det gjelder ikke på innkjøpsområdet, men det gjelder på andre områder da. Altså vi føler liksom at vi strekker ikke helt til da. Og derfor tror jeg – at det er ikke vrangviljen eller at vi ikke evner det kanskje, men at det er at kapasiteten ikke er der.»	(Respondent Nord-Fron, 2023)
Medium	“Det er korrekt, det er ikke bare mangler på penger, men også de menneskelige ressurser i form av at du har nytenkende ansatte og folk som har viljen til å prøve noe nytt.”	(Respondent Molde, 2023)

Appropriate allocation of resources was presented by some respondents as a key driver in the larger municipalities, while in the medium- and smaller sized municipalities, there was

a perceived lack of resources allocated towards innovation, and thereby, the inappropriate allocation acted as a barrier. Public leaders can be drivers for innovation through their role in allocating resources, but in other cases be barriers through inappropriate allocation of the same resources. This finding supports earlier results on the public leaders role in PPAI (Mwesiumo et al. (2019); Olsen (2018) and Natário and Couto (2022)).

Following the Innovation bill (Stortinget) every part of the public sector is required to implement innovation strategies, however several respondents in the smaller municipalities expressed frustration about the current situation. Their perception was that there was no clear correlation between the goals of achieving social innovation, as expressed in the strategic documents from both government and local public leaders, and the resources that are allocated to the procurement section in their municipalities. The lack of resources for even completing the day-to-day tasks, leaves no room or otherwise allocated resources to achieve innovation in the procurement process. Therefore, the respondents pointed at their low capacity as a great barrier to overcome before they can innovate in the procurement processes. This barrier counteracts the drivers like strategic goals and documents. Some of the smaller municipalities even had difficulties attracting people to their vacancies in their procurement department, thus further illustrating that it can be more difficult to implement innovation in the smaller or medium sized municipalities.

While larger municipalities like Oslo and Bærum reflected upon how being a municipality of considerable size maybe have helped them in implementing PPAI. Comparatively, the larger municipalities have more resources, both in terms of budgets and available human resources. When one of the respondents was asked if being a large municipality acted as a barrier, however the respondent stated that by being a large municipality is more of a driver, due to their ability to scale up their procurement section and support consumers with their needs while also implementing PPAI. From the respondents' point of view, being large municipality constitutes a real strength by having resource allocated to procurement.

<i>Group</i>	<i>Quote</i>	<i>Respondent</i>
<i>Large</i>	<i>«Ikke sånn som jeg kan komme på i farten, kanskje snarere tvert imot. Det er også mye muskler og ressurser i en stor kommune.»</i>	<i>(Bærum municipality, 2023)</i>

Analysing the difference across the cases, the following statements can be made:

- 1) Integration of PPaI is affected by resource allocation, either making it a barrier or a driver dependent on resources available and resource allocation.
- 2) It is more likely to integrate PPaI in larger municipalities due to economics of scale.
- 3) Lack of resources creates a lack of innovation.

This means that inappropriate resource allocation acts a major barrier that smaller and medium sized municipalities must be aware of. By allocating appropriate resources the public leaders make a clear statement on the importance of PPaI, as well as creating a driving force to implement innovation in public procurement processes. Even though it can be seen as obvious that lack of resources creates a lack of innovation, this seems to be overlooked in the smaller sized municipalities according to the respondents.

4.3 Organizing public procurement

From the literature analyses we have seen that there are some clear advantages and disadvantages related to how one organizes the public procurement department. This topic was also discussed with the respondents to observe if this has any implications on implementing PPaI across the different categories. While discussing how the different municipalities had organized their public procurement department, many of the respondents expressed a lack of knowledge as to why their procurement sections are organized how they are. Across the different municipalities there were several different methods used to organize the procurement sections. This indicates a wide range of choices that the municipalities have taken and could indicate lack of strategic anchoring when it comes to procurements. I also found it peculiar that municipalities within the same groups have different approaches to how their procurement section should be organized.

If we compare Nord-Fron and Vågå municipality one can see that there is no coherence across the smaller-sized municipalities. The lack of awareness of how organizing the procurement function affects their ability to integrate PPAI across the municipalities is a surprising finding. When discussing this during the interviews, many of the respondents expressed some discontent as how they were organized, and the challenges they meet in their municipality due to how they are organized. However, many of the respondents did not have the conclusion on why they were organized as they were.

Group	Quote	Respondent
Small	«[...]Men når det gjelder selve samarbeidet, så er det slik at man som innkjøpsleder, sitter som en tjenesteleder i vertskommunen. Det gir ikke den nødvendige myndigheten som skal til i kontakten de andre kommunene.»	(Vågå municipality, 2023)
Small	«[...]Der mener jeg at vi jo er en liten kommune og kunnskapen de sitter med i forhold til dette med innkjøp ikke er så høy, og heller ikke her sentralt, for så vidt. Han som sluttet, hadde veldig god kompetanse på innkjøp, men. Men ellers er det, altså vi er små og det er ei utfordring. Fordi at når du skal lage kravspek og klarer å stille de rette spørsmålene og be om de rette ting, det er en kunst og mange blir dermed skeptiske til å være med i brukergrupper da. Fordi at de er redd de ikke vil oppfylle forventningene på en måte.»	(Nord-Fron municipality, 2023)
Medium	«[...] der vi har en dedikert gjeng av 7 stykker som jobber med offentlige anskaffelser. Altså blir et kompetansemiljø. De var bevisst valg tilbake i 2015 at man ønsket å etablere et kompetansemiljø, nettopp fordi man så at offentlige anskaffelser må være profesjonelt.»	Molde, 2023
Large	«Det er nok lengre tilbake i historien enn jeg kan gi deg et bilde av. Jeg er ikke uenig med deg, jeg har mange ganger vært frustrert over den desentraliserte styringsstrukturen, men jeg skal ikke begi meg inn i grunnen til det, det tror jeg ikke jeg har historien nok til å si det[...]»	(Oslo municipality, 2023)

Large	<i>«Nei altså. Godt spørsmål. Jeg tror vel at den største begrensningen ikke ligger på anskaffelsesmiljøet per i dag. Den ligger nok i det å se mulighetsrommene ut der behovene ligger. Vi er en sentral anskaffelsesenheter. Vi har jo «ingen behov» i forhold til det som skal kjøpes. Vi skal jo bistå resten av kommunen med å oppfylle sine behov[.]»</i>	<i>(Bærum municipality, 2023)</i>
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The two municipalities in our category “smaller municipalities” are organized differently. While Vågå has an intermunicipal cooperation with six other municipalities, Nord-Fron only has a centralized unit with one procurement employee and one business consultant who supports when needed. Although both are similar in terms of size, location, and somewhat culture, they have chosen completely different ways to organize their procurement. It seems to be quite random how their procurement sections are organized. Different organization of the procurement function creates different challenges, barriers, and enablers for adjustments and changes in the public sector. The quotes from the smaller municipalities illustrate that although they have chosen different ways to organize their procurement function, they both have challenges that are quite unique.

If we look at the quotes from the large municipalities one can see that they also have challenges due how they are organized. The respondents’ express barriers and challenges that appears due to the nature of their structure. So how does this influence PPAI? The key takeaway from this finding is understanding that the choices conducted while organizing a procurement function can heavily influence their ability to integrate PPAI. For instance, too much focus on centralizing the unit, one can get less sense of the needs that the customers have. While on the other hand too much focus on decentralizing the procurement function one can dismantle the expertise on the subject. Finding an optimal organization for the procurement function is a strategic choice that the management of each municipality must undertake. To summarize, I found that across the different cases there are multiple ways the procurement function is organized, this seems to create unique barriers to each municipality, increasing the difficult task of integrating PPAI.

4.4 How to assess innovation in public procurement?

A theme that respondents found interesting to discuss without my explicit questioning was how the assessment of innovation in their procurement processes was conducted. Many of them had no key performance indicators (KPI) for innovation from the political level. The larger municipalities indicated that assessment of innovation is difficult due to the nature of the phenomenon. While others reflected whether the definition of innovation could be too expansive and expressed that only having a supplier dialog often is not enough, even though it is considered an indicator of innovation. However, an important aspect mentioned by some respondents is the focus on creating innovation friendly processes in procurement, given that supplier market has the same philosophies.

Group	Quote	Respondent
Large	<i>«Så uten at man legger seg så opp i hva definisjonen på innovasjon og innovasjon av offentlige anskaffelser er, for noen vil definisjonen være at så lenge man har leverandørdialog så er det en innovativ prosess, det er jeg overhodet ikke enig i. Jeg tenker et mye bedre ord er innovasjonsvennlig prosesser, hvor man tilrettelegger for innovasjon dersom leverandørmarkedet vil gå den veien.»</i>	<i>(Oslo municipality, 2023)</i>

The lack of overall KPIs to assess how municipalities have operationalized innovation in their procurement process, from a strategic level, is a key finding across all cases. The quotes illustrate a lack of overall framework to assess PPAI. Even the larger municipalities with established PPAI procedures acknowledged that they lacked the necessary tools to assess it.

Group	Quote	Respondent
Large	<i>«Måling er jo et forbedringspotensial, vil jeg si. Men det skal sies at vi prøver å måle gevinster, og det er jo også en del av planleggingsfasen. Det å identifisere gevinster som vi ønsker å oppnå i anskaffelsen gjør vi jo. Dermed er gevinster på en måte dokumentert i denne anskaffelsesplan som jeg snakket om. Men i hvilken grad vi klarer å måle det i ettertid vet jeg ikke? Det har vist seg å være relativt</i>	<i>(Bærum municipality, 2023)</i>

	<i>vanskelig på en del ting. Altså da snakker jeg både om økonomiske budsjett gevinster og kvalitative gevinster av ymse slag. Men vi gjør jo et forsøk på å måle det.»</i>	
Small	<i>«Nei, altså vi er veldig dårlig på det faktisk. Altså i forhold til internt i kommunen, for det finnes et kommunebarometer, og det finnes jo andre ting.»</i>	<i>(Nord-Fron Municipality, 2023)</i>
Medium	<i>«Vi måler ikke direkte, men har en mer beskrivende tilnærming når det gjelder om vi har bidratt til innovative løsninger, men det er ikke noe krav i mine medlemskommuner og det er heller ikke noe krav her.»</i>	<i>(Molde, 2023)</i>
Large	<i>«Nei vi har ingen direkte måleparatmeter for Innovasjon. Vi har KPIer, men de går mer mot politiske målsetninger og føringer slik som andelen av nullutslippstransport, andelen økologisk mat som kjøpes av Oslo kommune for å nevne noen. For å kunne score bra på de så er vi avhengig av å ha tenkt innovasjon i de kontraktene som ligger i bunnen for å kunne få til en positiv utvikling, så indirekte ha, men ikke konkret innovasjon, det blir vi ikke målt på.»</i>	<i>(Oslo municipality, 2023)</i>

As the quotes illustrate, there is a consensus amongst the respondents that it is difficult to assess how innovative they are. The lack of a systematic way of measuring PPAI, and the lack of strategic oversight over innovation in the procurement process generates barriers towards integrating innovative approaches into the day-to-day workflow. However, by implementing a more pragmatic and direct way of measuring innovation in the procurement process could facilitate for innovation to a greater extent.

4.5 Enablers and barriers across the categories

In this subchapter I will present the key differences between the three categories. Although we have already discussed some of the differences and commonalities across the categories, this subchapter will systematically present enablers and barriers for each of the categories. This aim of this chapter is to present how the different enablers and barriers affect each category and how the totality of these factors places them on the development model presented in chapter 2, the development model for procurement functions.

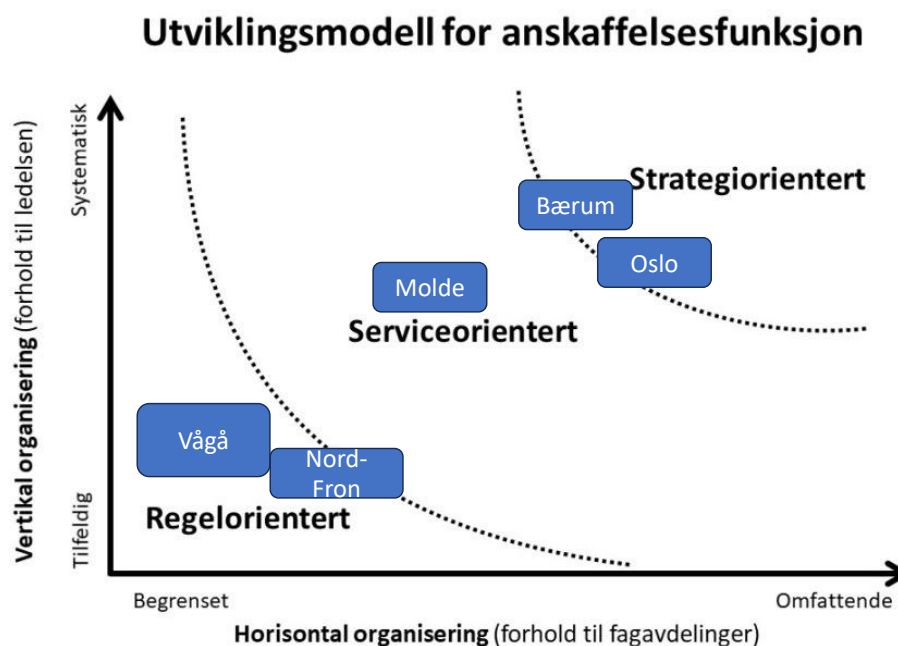


Figure 14 | *The different municipalities on the development scale. Category small has rule-oriented procurement functions, category medium has service-oriented and category large has strategy-oriented procurement functions.*

Figure 13 shows that both municipalities from the category “small” are assessed to have rule-oriented procurement functions. Molde on the other hand is assessed to be a service-oriented procurement function, while both Bærum and Oslo are indicated to be more strategy-oriented procurement functions. In the following sections I will explain how the different municipalities fall into their respective assessment categories, and discuss which enablers and barriers are unique to them taking into account the data analysis.

4.5.1 Enablers for innovation in the smaller municipalities

Although I have assessed the procurement function of these municipalities to fall into the rule oriented category, there were several indicators that show that the development is positive, and that there are some enablers for innovation present here as well. The respondents from the smaller municipalities acknowledged that procurement as a subject is quite demanding. This shows that the municipalities recognizes that the subject must be prioritized, and the respondents reflected upon which changes must implemented to further develop their procurement function.

<i>Group</i>	<i>Quote</i>	<i>Respondent</i>
<i>Small</i>	«[...]Når vi kommer til innkjøp, så er det så krevende fagfelt. Det er blant annet så krevende område å holde seg oppdatert på at jeg tenker at her bør man være flere[...]»	(Nord-Fron municipality, 2023)
<i>Small</i>	«[...] Kompetansen på innkjøpsprosesser er under oppbygging. Innkjøpskontoret i Nord-Gudbrandsdalen ble etablert i 2018[...]»	(Vågå municipality, 2023)

The above quotes highlight that the municipalities are aware of the challenges today, and that they are willing to implement concrete changes to further develop their procurement function. This is a driver because they acknowledge the need for a strong professional environment, which in turn is a prerequisite for integrating innovation. Another driver for innovation in procurement function is the shorter distance from the procurement function to the customers, the population and other business. This gives the procurement functions in the smaller municipalities a greater situational understanding compared to the larger municipalities. If the smaller municipalities can take advantage of this driver, they have potential to achieve major social innovations, bettering the lives of the population in their municipalities.

4.5.2 Barriers for innovation in the smaller municipalities

The main barrier for innovation in the smaller municipalities is according to the respondents the lack of resources, which creates a multitude of challenges. In this subchapter I will present the how other barriers are also affecting the smaller municipality's ability to integrate PPaI. But first, one must further explain the lack of resources, as this reinforces other barriers, e.g. increased risk aversion and worse behaviour. It seems the lack of resources creates a clausal mechanism, leading to other barriers emerging or being reinforced. Figure 14 illustrates how the barrier "lack of resources" can create other or reinforce other barriers, culminating to an increased threshold to integrate PPaI.

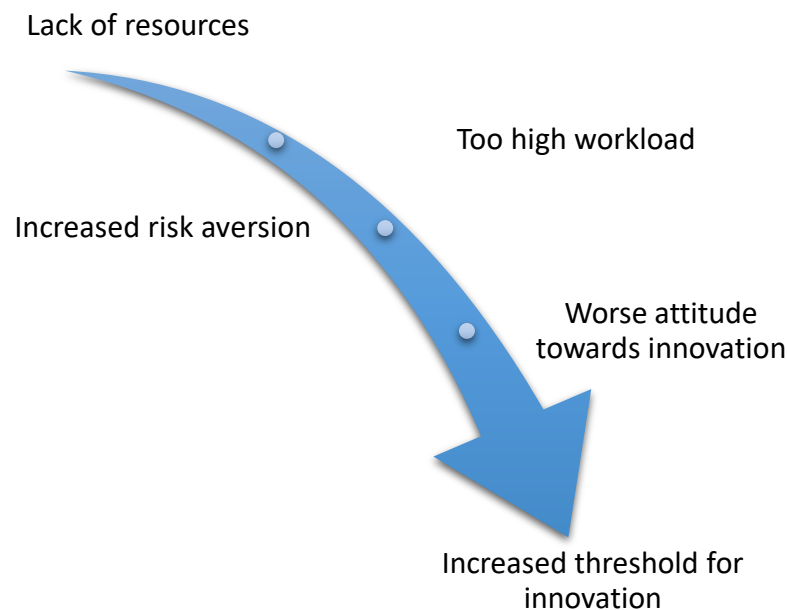


Figure 15 | Cause and effect of lack of resources. The main barrier lack of resources creates other barriers which affects the personnel and their attitude towards innovation. Lack of resources can create a lot of other barriers as well.

The respondents in the smaller municipalities explain the lack of focus on innovation as consequence of not having enough resources available. They explain that they do not have the capacity to conduct their daily tasks, for instance, one of respondents clarified that they are not able to carry out procurement competitions for framework agreements, forcing the municipality to prolong already existing agreements. This is further illustrated by the lack of human capital, with vacancies and arguably lack of necessary skills in the procurement functions. For instance, the manager for procurements in one of the municipalities is also responsible for economics and strategy. Managing procurements is a tertiary function of the respondent's position as a manager in the municipality. Making it obvious that innovation will be less focused on due to the extent of the workload. Another barrier is the influx of personnel with procurement expertise. For instance, one of the municipalities advertised for purchasing consultant due to a vacancy in their function. However, no real candidates for the position applied, displaying that they are quite vulnerable when losing employees. Making it harder to establish and maintain professional procurement environments.

Group	Quote	Respondent
Small	«[...]Nei, jeg sitter med det inntrykket at hvis vi skal bruke tid på det så må vi ha kapasitet til å bruke tid på det. Vi må ha kapasitet til å sette oss inn i de tingene, det gjelder ikke på innkjøpsområdet, men det gjelder på andre områder da. Altså vi føler liksom at vi strekker ikke helt til da. Og derfor tror jeg – at det er ikke vrangviljen eller at vi ikke evner det kanskje, men at det er at kapasiteten ikke er der.»	(Nord-Fron municipality, 2023)

Another barrier encountered, was the knowledge of local suppliers. The respondent from one of the municipalities expressed that local suppliers were distressed on the current situation. They lacked the necessary skills to use electronic procurement software systems, e.g., DOFFIN and MERCELL. This can create a barrier for innovation, as scholars are quite certain of that proximity to the demands are vital in achieving good social innovation and that local suppliers has a vital role in this (Edler & Georghiou, 2007; Natário & Couto, 2022).

Group	Quote	Respondent
Small	«[...]Nei slik som når vi kjører konkurranse, og så tenker de at det er så komplisert, for noen er det virkelig komplisert, siden de er så små og drive å legge inn i DOFFIN. Ikke alle er vant til å forholde seg til dette her da, så de synes at ... og da må dem konkurrerer kanskje med en større leverandør som er litt mer profesjonelle på det området. Ja også taper de konkurransen og når du ikke oppnår prismessig eller kanskje levere de ikke engang tilbud, da blir det vanskelig.»	(Nord-Fron municipality, 2023)

Furthermore, the municipalities have an insufficient grasp of social innovations and PPAI due to a lack of necessary understanding and knowledge of the themes. This creates a barrier for innovation, but this also reinforces other barriers like attitude and behaviour, increasing the threshold for integrating PPAI.

To summarize, an overview of barriers affecting the smaller municipalities can be viewed in table 3. There are a multitude of barriers present in the smaller municipalities, however the lack of resources and capacity are the main barriers the smaller municipalities must overcome to be able to integrate innovation. There are however some enablers present, like the proximity to demands and an agreement that innovation is a vital step towards reaching the objectives of social innovation.

Table 5 | **Summary of barriers present in category 1**

Barrier	Description of the barrier	Category
Lack of capacity	Too high workload, vacancies, and lack of resources.	Leadership and organization
The local suppliers lack knowledge about the digital systems	Local suppliers are frustrated and lack the necessary skills to compete when the municipality issues contracts.	Process and tools
Little use of external resources	Smaller municipalities hardly use or benefit from external resources, like Statens innkjøpsenter and LUP	Culture and values
Lack of knowledge about PPaI	A component of knowledge gap regarding PPaI might be present.	Human capital
Difficulties establishing and maintaining subject environments	The influx of personnel and competence hinders the procurement function to develop.	Leadership and organization
Attitude and behaviour	The lack of knowledge about PPaI, and the objective of SI creates a worse organizational behaviour and attitude towards innovation.	Culture and values

Description: The municipalities in this category have many barriers to overcome to be able to integrate PPaI, and this table gives an overview of the barriers with short descriptions of each barrier.

In conclusion, the smaller municipalities are therefore assessed to have rule-oriented procurement function. This is due the many barriers, hindering their ability to function strategically, and thereby also having difficulties integrating PPAI.

4.5.3 Enablers for innovation in the medium-sized municipality

Table 3 present the different enablers that are increasing the potential for integrating innovation in this category. The medium sized municipality has a subject environment, where procurement professionals work co-located and therefore a collection of expertise is available. By having the expertise in purchasing, they can focus on integrating innovation. Furthermore, they also have both a procurement and an innovation strategy, this gives the respondents mandate to innovate, thereby acting as an enabler for innovation. There is also an awareness of how one can utilize external resources to reach the goals of innovation strategy, like Statens innkjøpscenter and LUP, to achieve innovation.

Table 6 | **Summary of enablers present in category 1.**

Enabler	Description of the enabler	Category
Subject environment	Established a subject environment collecting expertise	Leadership and organization
Procurement strategy and innovation strategy	Creates frameworks for innovation and procurements.	Process and tools
Ongoing work on attitude and behaviour	There is an ongoing work to change attitude and behaviour to become more open for new solutions.	Culture and values
Utilization of external resources	Use of external resources and dialog with other municipalities.	Process and tools.

Description: Enablers are also present in this category, and the smaller municipalities can utilize these barriers to integrate PPAI. Each enabler is listed with a short description.

In conclusion there is a greater number of facilitators present in the medium-sized municipality compared to the smaller ones. The medium-sized municipality has the capacity and potential to integrating PPAI, in a much greater extent compared to the small-sized

municipalities. However, there are still several barriers that hinders them to fully integrate and develop innovation to their procurement function.

4.5.4 Barriers for innovation in the medium-sized municipalities

However, there are still several barriers that hinders them to fully integrate and develop innovation to their procurement function. Many of the barriers present in the small-sized municipalities are also present here, like the lack of resources, attitude and behaviour and difficulties engaging local suppliers. This subchapter will present other perspectives on the barriers and present reflections done by the medium-sized municipality. One of the major obstacles that the respondent from this municipality encountered was how the public reacts to innovative processes and how this could potentially increase the risk of aversion. The citizens of the municipality seem to be sceptical to how their tax money is spent. This creates according to the respondent an increased risk aversion, and less focus on innovation.

<i>Group</i>	<i>Quote</i>	<i>Respondent</i>
<i>Medium</i>	<i>«[...] «Er dette riktig ressursbruk?». Så du har en del skeptiske innbyggere[...]Så fokuset er veldig på ressursbruken, sløsing, eller risiko man tar. Dette er også noe som ligger der tror jeg. »</i>	<i>(Molde municipality, 2023)</i>
<i>Medium</i>	<i>«Men når det gjelder innovasjon så er det fortsatt uklart for oss på hvorfor vi skal ta risikoen for at nye løsninger kommer på plass fordi vi står med hele risikoen alene som en norsk municipality. Og det er kanskje også forklaringen på hvorfor ikke innovative offentlige anskaffelser ikke har slått helt gjennom i kommunal sektor[...]»</i>	<i>(Molde municipality, 2023)</i>

The risk aversion is also amplified due to the short distance from the employees to the residents. Employees in the medium-sized municipalities are a part of the municipality and can be recognized in their local community. The employees' risk being mocked or excluded from the community if a procurement goes badly, therefore there is no incentive for them to try an unproven procurement. Furthermore, the municipality does not have an incentive to conduct innovative procurement processes when the risks are solely on them.

In summary, there are similarities between the barriers encountered in the smaller municipalities and the medium-sized municipality. However, there are many more enablers present for innovation in the medium-sized municipality which are not seen in the smaller ones. For instance, the municipality has strategic documents that focuses on the topics of innovation and procurement. Furthermore, the chapter on barriers presents perspectives that expand and amplifies the effect different barriers have on a medium-sized municipality's ability to integrate innovation.

4.5.5 Enablers for innovation in large municipalities

The two municipalities in this category are Oslo and Bærum, both have strategy-oriented procurement functions. This is due to several years of focus on developing strong and resilient procurement functions by establishing and maintaining a professional procurement community. This has helped the procurement functions to develop and mature, therefore the municipalities in this case have many enablers in place for innovation – and are currently some of the leading municipalities when it comes to PPAI. Some of the enablers are that they have strategic documents with high focus on innovation, strong professional environments, effective utilization of external resources (like LUP and Statens innkjøpssenter), the ability to allocate specific resources, and a willingness to change as a consumer. These enablers result in them being able to integrate PPAI in a larger manner.

<i>Group</i>	<i>Quote</i>	<i>Respondent</i>
<i>Large</i>	«[...]det er en arbeidsplass jeg trives godt med og med en arbeidsgiver, innenfor det jeg brenner for, som er anskaffelser, som har sett verdien av det og hvordan man kan bruke anskaffelser strategisk og som satses på anskaffelser. Anskaffelser blir her sett på som viktige for å sikre morgendagens behov, men også i forhold til hvordan vi kan utnytte budsjettene våre på en bedre måte og hvordan vi kan operasjonalisere politikk. Summen av alt dette gjør det veldig spennende å jobbe med anskaffelser et sted hvor anskaffelser er så høyt flagget som et strategisk virkemiddel.»	(Oslo, 2023)

Large	<i>«Det må jo være forankring først og fremst. At det er en uttalt målsetting at man skal øke bruken av innovative anskaffelser. Det står sentralt.»</i>	<i>(Oslo, 2023)</i>
Large	<i>«[...]For å si det sånn vil jeg si at vi har klart å implementere innovative metodikken, innovative anskaffelser i våre vanlige anskaffelser.»</i>	<i>(Bærum, 2023)</i>

The above quotes show that innovation is on the agenda for the municipalities and they also have many examples of using PPaI to achieve social innovations, bettering the lives of their citizens and also winning prizes for their efforts towards PPaI (DFØ, 2022; Leverandørutviklingsprogrammet, 2023).

4.5.6 Barriers for innovation in large municipalities

The innovation quest is not over for the larger municipalities, and there are still some barriers that they must overcome, and some of the barriers are particularly connected to the size of the municipalities. One barrier is the ability to map the demands sufficiently, there are many citizens in the municipalities and therefore also many different demands. The respondents reflected on how this affects their ability to innovate and concluded that many great solutions can be lost due to the complexity and size. Another barrier is spreading the information and solutions across the whole municipality.

Group	Quote	Respondent
Large	<i>«[...]Oslo kommune er veldig stort og veldig komplekst fordi det er så mange ulike virksomheter og det å komme i kontakt med brukere og behovshavere er ikke nødvendigvis enkelt, så det er nok det som er den største utfordringen sånn sett.»</i>	<i>(Oslo, 2023)</i>
Large	<i>«Det er klart at det er mange barrierer for oss også. Den største barrieren er nok å finne ildsjelene, kunnskapsspredning for de som ikke jobber med anskaffelser, slik at de er bedre kjent med mulighetene.»</i>	<i>(Oslo, 2023)</i>
Large	<i>«[...]Jeg tror vel det at den største begrensningen ligger ikke på anskaffelsesmiljøet per i dag. Den ligger nok i det</i>	<i>(Bærum, 2023)</i>

å se mulighetsrommene ut der behovene ligger. Vi er en sentral anskaffelsesenheter. Vi har jo «ingen behov» av i forhold til det som skal kjøpes. Vi skal jo bistå resten av kommunen med å oppfylle sine behov. [...]»

But the main barrier for integrating innovation more strongly is convincing the other business in the municipality to become more open to innovation. They business are the ones with demands, and this is also where the opportunities for innovation exist. They are the stakeholders and are a vital part of seeing opportunities, both in process innovation and product innovation.

Although the municipalities in this category have strategy-oriented procurement functions with many enablers in place for integrating PPAI, there is still other barriers to overcome. The ability to convince other businesses and being able to map the demand sufficiently are two barriers correlated with their size. However, they have through focused efforts been able to integrate innovation to a larger extent.

5.0 Discussion

Across all the municipalities I have analysed it seems that the personnel are willing to innovate and that they see the value of implementing PPAI. However, in the small- and medium-sized municipalities there is a potential to change their attitude towards innovation to a become more positive and embracing the possibilities that innovation brings. During this chapter I will discuss the findings and which measures that can be taken to integrate innovation stronger in public procurement. Additionally, I will be presenting and discuss the limitations of the study. The previous chapter must be seen in relation to this chapter, as it provided answers to the research question – and during this chapter these findings will be discussed in a broader context. As a reminder, I will present the overall goal of PPAI, enabling SI, and thereby solving societal problems. With that context in mind, there are a multitude of barriers across the public procurement functions in Norway. Although this may be true, I have also shown that public procurement as a subject has changed drastically over the years and that these changes have been positive, increasing the public sector's ability to innovate.

5.1 Mentoring can accelerate maturation of professional procurement communities.

To innovate, many conditions must be met. Among these: 1) the municipalities must have the necessary resources, 2) leaders must advocate innovation and have a deep understand of the user needs, as well as a deep understand of the supplier market. However, these conditions alone are not enough to integrate PPaI. It seems from the findings that there must be a maturation of the procurement community in the municipalities. As I presented during the findings, public procurement in Norway has gone through several transformations and matured in the past decades. Evident from the differences between the municipalities, it seems that this maturation has not reached the smaller and medium sized municipalities. During the literature review we got an understanding that both public procurement and innovation by themselves, as separate phenomena are quite demanding, and even more demanding when mashed together as it is in PPaI (Ek Österberg & Qvist, 2020; Mwesiumo et al., 2019; Rolfstam et al., 2011). Therefor the smaller and medium sized should focus on establishing professional communities for procurement. This could be through establishing dedicated procurement sections, or by guidelines and cooperation with such communities.

For the smaller municipalities it could be difficult to attract the right personnel due their size and location. Some of the municipalities in this study expressed frustration with not being able to employ personnel with the right competence. In this situation, the smaller municipalities should capitalize on intermunicipal collaboration with other smaller municipalities – or establish an intermunicipal collaboration with larger municipalities who are more experienced in implementing PPaI, such as Oslo or Bærum. This sort of collaboration could take the form of a mentorship between the larger municipalities and smaller ones, and thereby help them establish the public procurement communities and help accelerate the development of the procurement function, and apply the appropriate changes.

By doing this, the small – and medium sized municipalities could capitalize on having a more experienced sparring partner, who they could engage in discussions and who could provide feedback and guidance on how they should implement PPaI. Furthermore, this could mitigate the threshold of commencing PPaI. As we have seen from the findings many of the smaller and medium sized municipalities do not feel that they have adequate resources, both knowledge and time, to conduct PPaI. By establishing mentoring between more experienced

and less experienced municipalities, one can facilitate for exchange of experience, guidance and possibly even change attitudes and behaviour along the line. This could also improve the less experienced municipality's ability to facilitate for EDI. If innovation is presented as an external demand, this could create a barrier for innovation (Edler & Georghiou, 2007; Rønningen, 2021), but with the mentorship one could develop a culture and arena for creative problem solving, which would facilitate for innovation in the procurement process.

5.2 Innovation culture depends on adequate resource allocation

There is a large consensus amongst scholars that leaders can be barriers or enablers for innovation dependent on their attitudes and behaviour (Natário & Couto, 2022; Yuriev et al., 2022). This study adds another dimension to this barrier and showcases that adequate resource allocation is a leadership task – which can either make or break how a public leader advocates for innovation and how employees respond. But how can a public leader allocate the necessary resources? The perceived lack of resources is not a barrier that is unique for procurement functions, other parts of the public sector also communicate a lack of resources. For instance, the health sector in Norway was estimated to lack nearly 13 000 employees (Myklathun, 2023) and the Norwegian Armed Forces have major deficiencies both in personnel and materials (Storberget, 2023). The thought-provoking part of this is that the perceived lack of resources feels like a characteristic of the public sector in Norway. However, both reports from OECD and the Norwegian government presents a trend where the Norwegian public sector is becoming larger and larger, where spendings exceed income (Regjeringen). This again highlights the need for innovation, and new solutions to the society's problems and emphasises the role of the procurement functions and government spending.

Tracing back to the respondents' reflections on lack of capacity and resources, how can a public leader facilitate for innovation when they lack the resources? I assume that a main task considering resource allocation is to analyse the gap between objectives in strategic documents and the current situation. A large gap between the resources available and the objectives of the strategic documents, can create bad attitude and influences the innovation culture. As presented in the findings chapter, some of the respondents expressed frustration on how innovation has been integrated in their strategic documents. This counteracts the anchoring, and the mandate strategic documents are supposed to give procurement functions and creates a worse attitude towards PPAI. The aim of this is that there must be a connection

between efforts towards innovation and the objectives that are intended to be achieved, otherwise it will be difficult to integrate innovation culture.

On the other hand, it is important to remember that although a municipality has adequate resource allocation for innovation, it is not necessarily the case that they will immediately start integrating innovation to their procuring (Fan et al., 2022). However, the allocation of resources can potentially change attitude of the personnel conducting public procurements, making them more willing to innovate and nurturing EDI culture.

5.2.1 Methods of organizing the procurement function will affect the innovation culture

In chapter five I presented that there are many ways the municipalities organize their procurement functions. For some of the municipalities there seems to be no clear strategic reasoning behind the chosen organization, and this creates many ad hoc solutions. The establishment of innovation culture is dependent on how information is disseminated, and how power is distributed (Rønningen, 2021). Both elements can be interlinked with the methods a municipality organizes their procurement functions. By establishing and having professional environments one can allow for faster information dissemination, increasing knowledge, and having support available. Another pre-requisite for EDI is that the municipalities must have more than just a few people working with the subject. Ekvall (1996) studied innovation environments across different private firms. However, the main conclusions about the connection between organizational climate, individual creativity and innovation are relevant for the public sector. The key point of discussion is to understand that the choices taken while organizing a procurement function can greatly influence their ability to integrate PPaI. Finding an optimal organization for the procurement function is a strategic choice that will influence the innovation culture and thereby also the ability to integrate PPaI.

5.3 Mapping innovation space is a key task often overlooked

As mentioned in the literature review, the ability to map innovation is a crucial task when a business is trying to innovate. It seems from the findings that mapping innovation in a good manner is difficult to achieve, across both small-, medium- and large-sized municipalities. Mapping innovation space is an important task that one must apply to be able to identify,

categorise and visualise the different possibilities and opportunities a company has, which is also the case for the public sector (Tidd & Pavitt, 2011). However, it seems that there are difficulties to map the needs of the customers, affecting the municipalities' ability to conduct innovation mapping. This makes it difficult for the procurement functions to innovate and creates an increased threshold. Furthermore, the 4Ps model presented both radical and incremental innovation. As I presented during the findings, many of the respondents expressed their understanding of innovation as more towards radical innovation and had less focus on incremental innovation.

For instance, some of them expressed that there is no room for radical innovation in procurement of products and services, but there is a more room for incremental innovation in the framework agreements to which they enter. It is more natural to seek incremental innovation of both process and product, it is difficult to radically change for example protective clothing. However, with a good needs-analysis and mapping of innovation space, one can possibly change attributes of the framework agreement so that it becomes more innovative towards the goals of social innovation. According to one of the respondents from the medium-sized municipality, they did not understand why they should take the risk of failing a procurement with innovation, however, with incremental innovation, the risks are much smaller. There seems to be a lack of this understanding among the smaller and medium sized municipalities. This could be due to the time constraints, and the lack of specific resources that work targeted for PPAI. By being more attentive of incremental innovation, the smaller and medium sized municipalities could achieve a better creation of social value.

5.4 Setting goals and sticking to them

Who is responsible for setting goals in Norwegian public sector? Naturally it is the government. The government sets these goals through different parliamentary notices and proposals (Stortinget, 2022). During the literature review I presented two different parliamentary notices, "Stat og kommune – styring og samspel" and "En innovativ offentlig sektor — Kultur, ledelse og kompetanse", both are relevant when discussing who is responsible for setting goals and measuring the performance in agreement with the goals. This process is called performance management and is the discipline of setting goals, allocating decision rights, and assessing performance (Frank, 2008). One can view the parliamentary notice on innovation as framework for innovation, giving guidelines and

outlining how the government want to achieve SI. While the actual execution of the framework is up to the different municipalities.

However, as I presented during the findings, the respondents expressed that the lack of overall KPIs creates difficulties for the implementation of innovation in the procurement functions. KPIs is just one of many tools that can be employed when managing performance, but there seems to be no real assessment and management of PPaI. There also seems to be misconceptions between government, municipalities, and purchasers with regards to whom the responsibility lies with, considering transition to a more innovative procurement process. This is not clarified, and according to the respondents, act a clear barrier for innovation. A debate post from the chairman of the board of LUP, CEO of KS, and CEO of NHO, showcased that only three percent of all procurements conducted in the public sector are innovative (Almlid et al., 2023). Further on, the authors, also expressed that politicians must set ambitious goals for PPaI to increase the amount of innovation (Almlid et al., 2023). There are some clear advantages for setting goals and assessing them from a political level. One method the Norwegian government could employ is changing the law, “loven om offentlige anskaffelser”. They recently changed the law, where environmental considerations must be emphasized at least 30% when procuring services and goods, to reach the objectives of more sustainable future (fiskeridepartementet, 2023). This could also be done with PPaI, demanding public procurements to focus on innovation and increasing the incentives for suppliers to think more innovatively.

However, there are some cons to a governmental legislation change, which then imposes innovation on the municipalities. This could be seen as an external demand to innovate, and this may cause adverse situations. Scholars have reported that when innovation is demanded by an external party this can potentially worsen the attitude of the personnel (Demircioglu & Audretsch, 2017; Rolfstam, 2012). This could also happen if the government sets a top-down goal, increasing both bureaucracy and possibly aggravating the local purchasers. However, there is a need for performance management. When discussing the different categories in this study, one can see that the ones that are able to innovate to higher extent, have had performance management (Oslo and Bærum) over the years, either through KPIs or other qualitative methods.

5.5 Enablers for integrating PPAI across the categories

As previously presented, the literature review revealed four key enablers: 1) the willingness from the employees to initiate innovation (Ekvall, 1996; Mwesiumo et al., 2019), 2) policies emphasizing innovation (Natário & Couto, 2022), 3) having and maintaining innovation culture, and 4) having leaders who advocate innovation and facilitate for it (Kitchen, 2015). Some elements of all these enablers are present in the different categories in this study, and many of the respondents have reflected on, as well as acknowledging that PPAI is the way to go. The larger municipalities are the ones who until now have benefitted the most from the different enablers and been able to integrate innovation as a principle in their procurement functions. Furthermore, the development and maturation in the field of procurement through years of focus are key success factors for the municipalities in category 3. This sheds a new light on how a municipality can integrate innovation. By acknowledging that PPAI takes time to integrate, the municipalities can focus on developing specific longitudinal plans to gradually establish innovation culture, changing attitude of the citizens and their own employees, mapping innovation space and, if necessary, reorganizing their procurement functions.

Table 7 | **Enablers across categories.**

Enabler	Category 1	Category 2	Category 3
Acknowledging that procurement and innovation is challenging	X	X	X
Procurement strategy and innovation strategy	X	X	X
Ongoing work on attitude and behaviour		X	X
Utilization of external resources			X
Utilization of PPAI as a strategic tool			X

The table shows which enabler is present across the different categories.

Table 7 show a summary of different enablers across the categories of municipalities. Another discussion point is that sizes of the different municipalities affect their ability to integrate innovation. The large municipalities have bigger budgets and thereby allows them to scale in accordance with demands, in this case more focus on PPAI to achieve SI.

Managers who have been able to integrate innovation as a principle in the procurement process seem to be more aware of the enablers. As we can see from table 7, the larger municipalities are able to “activate” the enablers in a larger degree than the other

municipalities in this study. The managers in category 3 have through years of dedicated work been able to build organizational competence for PPaI. This organizational competence is a vital part of their success, and this is built up through other enablers like establishing or reinforcing strategies for PPaI, dedicating resources towards innovation, and utilizing external resources like LUP. All these elements result in them being able to integrate PPaI in a larger degree than the other municipalities. In other words, there is room for managers to innovate, and political initiative is welcomed. In summary, the changes that have taken place in the procurement functions across Norway shows positive tendencies, but there are nevertheless many shortcomings and barriers to PPaI, and the municipalities have not been able to fully integrate PPaI.

5.6 Barriers and shortcomings municipalities should be aware of when trying to integrate innovation

There are several barriers still present when a municipality tries to integrate PPaI. As already covered, the main issue arises when the stated objectives are not allocated the adequate resources, I will therefore not discuss this here, but that is a key finding that nuances the how innovation is integrated. Furthermore, another shortcoming that is relevant across the categories is the municipality's ability to disseminate information to other part of the municipality and the citizens. As I have previously discussed the main funding of the public sector is through the taxpayers in Norway, this creates a need for governance and possibly more bureaucracy due to the expectations from the taxpayers (Demircioglu & Audretsch, 2017; Natário & Couto, 2022; Olsen, 2018). Nonetheless, this is only natural, so therefore it depends on the municipalities ability to convince the taxpayers that the risk is worth taking. One way would be to implement information campaigns, and concrete plans to change the attitude of the citizens. Involvement from the users to innovate can also encourage EDI and products and services that are tailored to the citizens.

Table 8 | **Barriers across categories.**

Barrier	Category 1	Category 2	Category 3
Lack of capacity	X	X	
Attitude and behaviour	X	X	
Information dissemination	X	X	X
Lack of knowledge	X		
Resource allocation	X	X	X

The table shows which barrier is present across the different categories.

Furthermore, the lack of capacity in case 1 and 2 is a dominant barrier that affects purchasers in those municipalities influencing other barriers like attitude, increasing risk aversion, and overall increasing the threshold to conduct PPaI. This mechanism and correlation shed a new light on the how municipalities should integrate PPaI. The main conflict arises when municipalities lack the capacity to conduct day-to-day tasks, but paradoxically enough that is maybe where innovation needs to find place the most. Another element that this study displays is how the different barriers affect each other, especially the lack of capacity and attitude and behavior. The study shows new barriers to integrating PPaI, that other studies have not previously shown, and gives perspective to leaders trying to integrate PPaI. The barrier “information dissemination” shows that all municipalities in this study has difficulties convincing other parts of their municipality and the residents that PPaI is important. The study also adds new knowledge on *how and why* some procurement professionals could have difficulties changing their attitude and behavior towards PPaI.

As we see from table 8, resource allocation and lack of capacity are two major barriers that managers must overcome. This could indicate that the managers across the municipalities lack the facilitation for innovation. Furthermore, the respondents reflected upon how, political, and managerial initiative must allocate specific resources towards the objectives. In summary, the study gives sheds new light on barriers affecting the integration of PPaI.

6.0 Conclusion

During this study the key focus has been process innovation and how one can integrate innovation in public procurement. The study has shown that it is possible to integrate PPaI, but there are many barriers that one must be aware of when implementing PPaI. Innovation in Norway seems to be held back for many years for a multitude of reasons, and this study analysed procurement practices across the different categories, consisting of small, medium sized, and large municipalities. The findings demonstrate that there is still work to do to facilitate the further development of public procurements. In this chapter I will summarize the research, with the some concluding notes on the findings and their implications for the field. I will also briefly discuss some limitations of the study, before presenting suggestions for future research.

6.1 Research summary

This study investigated a total of six procurement functions in Norwegian municipalities to explore if PPaI has been integrated, and if the personnel have the room and facilitation to innovate the processes. PPaI is an expressed area of focus from the Norwegian government, and the use of public procurement as a strategic tool to achieve social innovations is a stated objective (Government, 2020). However, there are many barriers that municipalities must overcome to achieve the stated objectives. Some of the barriers are connected to process and tools, for instance lack of performance management, while other barriers are connected to culture and values, such as bad behaviour and attitude towards innovation. These barriers, and the others listed earlier, creates an increased threshold to innovate in the procurement process, especially for the small – and medium sized municipalities. This increased threshold is also affected by other factors, especially the lack of resources has multiple consequences for the personnel who work with public procurements. One can almost view the barrier "resource allocation" as a symbol of other barriers such as worse attitude, increased risk aversion or information dissemination.

The barriers are related to each other. For instance, increased risk aversion can be explained by the lack of capacity or resources to conduct their daily work. Today's situation in the small and medium-sized categories is that the personnel will seek traditional solutions with a clear outcome rather than try to innovate their procurement processes. However, as the study has shown it is possible to integrate innovation to a procurement function. The larger municipalities have through years of focus and maturation been able to integrate innovation. Studies have earlier expressed a stronger mandate for PPaI (Olsen, 2018), however, this seems not to be an issue anymore. This could be due to the parliamentary notice giving municipalities the mandate to innovate. The study shows that the framework to achieve PPaI is in place. On the other hand, it seems that there is a lack of involvement from the strategic level. The lack of a standardized way to report innovation is an example of this. This leads to reduced focus on the subject, which might lead to governmental objectives not being achieved.

Although there are numerous obstacles to achieving the overall goal of PPaI, the work already undertaken or currently at work is already demonstrating benefits towards social innovation. This illustrates that the various measures taken during the past years have been

beneficial, and that an increase in focus should help integrate innovation into the procurement process, ultimately giving a better utilization of resources and social value. The municipalities in category “large” have successfully implemented PPaI, but they are also affected by barriers reducing their ability to fully integrate PPaI.

6.2 Managerial implications and recommendations

There are several barriers and enablers for integrating PPaI present in procurement functions across the municipalities in this study. In this section I will present what managerial implications the study has and offer some recommendations for managers and policy makers.

By being aware of the complexity of PPaI, managers and policy makers could avoid some of the friction that is present today when trying to implement innovation in the procurement process. One of the key findings is the leader’s role to facilitate for PPaI through resource allocation. Strategies and policies will have a greater effect if managers/policy makers allocate specific resources to facilitate for the strategy. The allocated resource could be risk capital, new employees or even courses for personnel who are already there. With the municipalities that have managed to integrate innovation to a greater extent, you can see that there are resources available to focus on PPaI.

Even with enough resources, managers and policy makers must acknowledge that integrating PPaI takes time. The development that has happened in public procurements in Norway are through years of focus and maturation of the professional environments. However, managers who want to implement PPaI should establish a network with other municipalities and external resources like Statens innkjøpscenter and LUP. A form of mentoring with these parties could speed up the process, where guidance can help avoid barriers. This could also bring more initiative across Norway as whole, with the pairing of experienced and less experienced municipalities. This recommendation is also cost-efficient, the only thing one needs is a name or phone number, and perhaps one hour, or two, per month dedicated for this. Although LUP and Statens Innkjøpscenter have similar “instigators” who advocates for innovation, this measure could scale up the focus and resources available.

Another major finding this study presents is the effect of municipalities' organization of their procurement function on their ability to innovate. There seems to be a correlation between centralized professional environments and a procurement function's ability to integrate PPaI. The factor that comes to view is that the largest municipalities have sizable professional environments, allowing a more resilient procurement function and giving the employees a surplus in capacity to be more open towards, and explore, innovation. Policy makers and managers must have a conscious awareness of how they choose to organize the procurement functions. The recommendation is to analyze their procurement functions and needs and be aware of the advantages or disadvantages that follow from their choices.

The last recommendation for managers and policy makers is to implement performance management to assess innovation. Considering PPaI, KPIs and performance management is, as earlier discussed, lacking and acts as a barrier. A concrete measure could be tracking and reporting the amount of supplier dialogs used during a year. Although, supplier dialog is not synonyms with PPaI it is an indicator for innovation. The old saying "what gets measured, gets done" has some truth to it, and managers who want to focus on innovation, should consider a form of performance management. Another measure that could be relevant is legislation of innovation as a criterion in the manner as climate and environmental considerations is weighted. This could force procurers to assess innovation and give incentives for suppliers to be more innovative.

6.3 Limitations of the study

This chapter will discuss limitations of the study, both limitations the researcher has had and other factor that have potentially affect the outcome of the study. The purpose of this chapter is to be as transparent as possible, in order to make future readers aware of limitations that must be considered while interpreting the study.

After two and half years of working in a part of public sector, I had some thoughts on how the public sector is conducting their work. These thoughts were both positive and negative. It is important for me, as a researcher, to acknowledge that previous experiences could have colored me and created biases. There have been multiple occasions where I have reflected upon this, to ensure that the biases are mitigated, and that I present the findings in an objective manner. Furthermore, a limitation that must be addressed is my ability as a researcher. I had little experience before this study, only a bachelor's degree. Although these

processes have been quite similar, the major difference has been time requirement. The master thesis has also been written while working a full-time job, this has meant long evenings and stressful periods. Finding time to conduct the research and write the thesis has sometimes proven difficult. There have been periods (up to three-four weeks) where I was not able to focus on the thesis as much as I want, making me lose my train of thought. This could have an impact on the outcome, however good notetaking has been crucial to mitigate this.

Another limitation is that there is only one respondent in the category medium, one less than planned. The research faced challenges when recruiting municipalities to join the study. This resulted in a sub-optimal number of respondents in the category medium. This must be taken into consideration when comparing smaller, medium, and larger municipalities that are represented in this study. Furthermore, the scope of the study is limited municipalities in Norway. This reduces the study's ability to be generalized to other parts of the public sector.

6.4 Suggestions for future research

In light of the findings and shortcomings of this study, I will present a list of research areas that others can investigate in the future.

The first suggestion is how artificial intelligence (AI) will affect public procurement. An important consideration on future aspects of PPAI should be the implementation of machine learning and or specifically trained AIs in public procurement. By augmenting the already existing focus on the use of digital tools and processes, I assume that the government can implement AI in all parts of the public sector, freeing up resources and creating better social value. A study investigating the potential usage of AI in the public procurements would be interesting and potentially revolutionize PPAI.

Secondly, it would be interesting to investigate how suppliers are affected by PPAI. Many studies, including this one, study the public procurer's perspective, but there is a research gap on how suppliers are affected. The study found that the small municipalities had some difficulties attracting local suppliers to bid when they announced a procurement. A study analysing PPAI from the supplier's point of view would be interesting, shedding light on an equally important contributor to PPAI.

Furthermore, I am quite curious on how PPaI has been integrated in other parts of the public sector. For instance, how the Norwegian armed forces (who are a member of LUP) or health sector has integrated it. This would give a deeper understanding of contextual integration of innovation.

Lastly, I would recommend future researchers to replicate this study. A possible way could be to investigate each category by itself. For instance, one could replicate this study with smaller municipalities being the focus of the study. This could give more data on each category and peculiarities would become more visible. By understanding the unique barriers and enablers on each category one could implement measures that are tailor made to that category.

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8.0 Annexes

Vedlegg A- Samtykkeskjema Vil du delta i forskningsprosjektet “Offentlige anskaffelser og innovasjon”?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å undersøke hvordan kommuner i Norge kan tilrettelegg for mer innovative løsninger når man gjennomfører offentlige anskaffelser. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Dette forskningsprosjektet er en masteroppgave ved Høgskolen i Molde (HIMOLDE). Hensikten med oppgaven er å sette søkelyset på hvordan offentlig sektor kan gjennomføre mer innovative løsninger når man anskaffer produkter og tjenester. Innovasjon i offentlig sektor blir sett på som en viktig katalysator for en mer bærekraftig og lønnsom offentlig sektor. Problemstillingen til denne oppgaven er følgende:

“How do managers in the Norwegian municipalities integrate innovation as a principle in Public procurement process?”

Med denne problemstillingen er planen å intervju 6 kommuner, men at jeg i hver kommune intervjuer både innkjøpere, og lederne til innkjøperne. Slik vil man kunne se hva slags barrierer som eksisterer på operasjonelt nivå gjennom bruker-intervjuene, mens man ser på hva slags utfordringer ledelsen sitter med.

Hvem er ansvarlig for forskningsprosjektet?

Høgskolen i Molde (HIMOLDE) er ansvarlig for prosjektet. Med følgende som prosjektledere:

- Student:
 - Navn: Ali Seena Jamali
 - Telefon: +47 95421172

- Epost: 191212@himolde.no
- Veileder:
 - Navn: Deodat Edward Mwesiumo
 - Telefon: +47 711 95 813
 - Epost: Deodat.E.Mwesiumo@himolde.no

Hvorfor får du spørsmål om å delta?

Som tidligere nevnt er det to perspektiv vi er ute etter i dette forskningsstudiet, både innkjøperes som jevnlig gjennomfører anskaffelser, men også lederne til disse. Du for spørsmål til å delta siden du enten er innkjøper eller lederen til innkjøpere. Det er altså to populasjoner som intervjues om samme problemstilling. Henvendelsen er sendt til 6 kommuner, og du har blitt tilsendt både intervjuguide og samtykkeskjema siden noen hos dere tenker at du kan være relevant personell til å delta i denne studien.

Hva innebærer det for deg å delta?

Dersom du velger å delta i dette forskningsstudiet vil det bety at vi gjennomfører et semi-strukturert intervju på 45-75 minutter. Intervjuet vil bli tatt opp på lydopptaker og jeg som intervjuer vil notere underveis. Data-en vil deretter transkriberes og fremlegges i studien anonymisert, eksempelvis R1 sitat «XXXX». Alle sitater vil fremsendes for gjennomlesning før oppgaven sendes inn.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrevet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. All informasjon om deg vil kun student og veileder ha tilgang til. Navn og kontaktopplysninger vil oppbevares hos student på egen datamaskin lagret på OneDrive med begrenset tilgang (for å få tilgang må vedkommende ha to-trinns autorisering. Du som deltaker i studien vil ikke publiseres i oppgaven, men få en kode som samsvarer med hvilken kommune du jobber i og stillingen. Dette er for å kunne skille mellom de ulike kommunene.

Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes?

Prosjektet vil etter planen avsluttes etter at sensuren foreligger i 2023. Etter prosjektslutt vil datamaterialet med dine personopplysninger slettes.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra HIMOLDE har Sikt – Kunnskapssektorens tjenesteleverandør vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke opplysninger vi behandler om deg, og å få utlevert en kopi av opplysningene
- å få rettet opplysninger om deg som er feil eller misvisende
- å få slettet personopplysninger om deg
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger

Hvis du har spørsmål til studien, eller ønsker å vite mer om eller benytte deg av dine rettigheter, ta kontakt med:

- Student:
 - Navn: Ali Seena Jamali
 - Telefon: +47 95421172
 - Epost: 191212@himolde.no
- Veileder:
 - Navn: Deodat Edward Mwesiumo
 - Telefon: +47 711 95 813
 - Epost: Deodat.E.Mwesiumo@himolde.no
- Vårt personvernombud:
 - Navn: Merete Ludviksen
 - Telefon: +47 712 14 118
 - Epost: Merete.Ludviksen@himolde.no

Hvis du har spørsmål knyttet til vurderingen som er gjort av personverntjenestene fra Sikt, kan du ta kontakt via:

- Epost: personverntjenester@sikt.no eller telefon: 73 98 40 40.

Med vennlig hilsen

Deodat Edward Mwesiumo
Veileder

Ali Seena Jamali
Student

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet *offentlige anskaffelser og innovasjon*, og har fått anledning til å stille spørsmål. Jeg samtykker til:

- å delta i intervju
- Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

(Signert av prosjektdeltaker, dato)

Vedlegg B- Intervjuguide

Intervjuguide tilknyttet forskingsprosjektet: “Offentlige anskaffelser og innovasjon”

Innledning

Dette forskningsprosjektet er en masteroppgave ved Høgskolen i Molde (HIMOLDE). Hensikten med oppgaven er å sette søkelyset på hvordan offentlig sektor kan gjennomfører mer innovative løsninger når anskaffer produkter og tjenester. Innovasjon i offentlig sektor blir sett på som en viktig katalysator for en mer Problemstillingen til denne oppgaven er følgende:

“How do managers in the Norwegian municipalities integrate innovation as a principle in public procurement process?”

Med denne problemstillingen er planen å intervju 6 kommuner, men at jeg i hver kommune intervjuer både innkjøpere, og lederne til innkjøperne. Slik vil man kunne se hva slags barrierer som eksisterer på operasjonelt nivå gjennom bruker-intervjuene, mens man ser på hva slags utfordringer ledelsen sitter med.

Formalia:

- Intervjuet blir gjennomført som individuelle intervju som har en semi-strukturert form.
- Lyddopptaker vil knyttes for å kunne gjengi informasjon korrekt.
- Deler av intervjuet vil bli transkribert, og det gis mulighet til gjennomlesing av notatene.
- Alle sitater vil fremsendes til respondent før oppgaven leveres.
- Respondenter vil bli anonymisert. Stilling/fylkesnavn på kommune vil komme frem.
- Studien er meldt til Norsk samfunnsvitenskapelig datatjeneste AS (NDS).
- Du kan når som helst trekke deg fra intervjuet.
- All data slettes så fort sensuren foreligger av oppgaven.

Spørsmål:

Bakgrunn

1. Kunne du startet med å fortelle litt om deg selv og hvor lenge du har jobbet med
2. innkjøp/anskaffelser?
 - i. Bakgrunn og utdanning?
3. Hvordan vil du beskrive denne kommunen som en arbeidsplass?

Del 1: Innkjøpsprosessen og konseptet innovasjon

4. Kunne du beskrevet hvordan dere i denne kommunen gjennomfører offentlige
5. anskaffelser?
 - a. Hvor godt etablert er prosessen?
 - b. Bruken av programvarer?
 - c. Hvilke parametere blir dere målt på?

- d. Hva er din rolle i prosessen?
- 6. Hvilken type innkjøp gjennomfører du?
 - a. Produkter eller tjenester?
 - b. Repetitive innkjøp eller prosjekter?
- 7. Hvordan vil du beskrive ditt kjennskap til innovasjon?
 - a. Hva legger du i ordet innovasjon?
 - b. Er du kjent med stortingsmelding «en mer innovativ offentlig sektor»?
 - c. Vil du si at du er godt kjent med hva som defineres som innovasjon?
- 8. Hva mener du om innovasjon?
 - a. Viktig/uviktig?
- 9. Har du noen eksempler på innkjøp deres kommune har gjennomført på en innovativ måte?
- 10. Hvor i anskaffelsesprosessen vil du typisk si at innovasjon finner sted hos dere?

Del 2: Innovasjon – drivere og sperringer

- 11. Hvor ofte vil du si at du innlemmer en mer innovativ tilnærming til anskaffelsene du du gjennomfører?
- 12. gjennomfører?
- 13. Opplever du at du har nødvendige ressurser til å kunne gjennomføre innovative tiltak i offentlige anskaffelser, eller innovere i anskaffelsesprosessen?
 - a. Kunnskap?
 - b. Kurs?
 - c. Ressurser i form av tid og penger?
 - d. Ledelsens støtte?³. Hvilket forhold har du til innovasjon?
 - e. Er du villig til å innovere?
- 15. Gitt at du har nødvendige ressurser, hvordan kunne du sett for deg å innovere i dine anskaffelsesoppgaver?
- 16. Har kommunen arrangert eller holdt informasjonskampanjer for mer innovasjon?
- 17. Hvilke barrierer mener du eksisterer i denne kommunen?
- 18. Mener du din nærmeste leder gjør nok for å fasilitetere for innovasjon?
- 19. Er det noe som savnes, burde berøres, i lys av oppgavens problemstilling som jeg ikke har vært innom eller som du ønsker å nevne?