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A Case Study of Innovation Procurement Partnership Within the Norwegian Health Care Sector

Navn: Oda Skandsen, Tina Margrethe Bøe

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Abstract

Public procurement is recognized as a driver for innovation. However, the highly regulated public procurement in Norway has been criticized for not serving the purpose of procuring innovative solutions. A new framework was introduced in Norway in January 2017 with the intent of addressing this: innovation procurement partnership. Our master thesis explores this framework by looking into innovation in the interface of the private and public sector. The Norwegian health care sector is the context of our study, emphasizing the perspective of private organizations. Our thesis has the following research question: *How can innovation procurement partnerships contribute to innovation between public and private sector?* To explore this we have used the institution based view to understand how institutions create enablers and barriers to innovation.

Based on an explorative research design consisting of a case study of the phenomenon of innovation procurement partnership, we provide several suggestions. We imply that the framework of innovation procurement partnership itself can be seen as an enabler. This by providing new mechanisms which facilitate innovation, such as increased possibilities for dialog, flexibility, and funding of the development. On the other side, it is found that the greatest barriers to innovation lie within the normative and cultural differences of the public and private sector. These differences can be an obstacle for efficient collaboration and innovation. We suggest that in the execution of an innovation procurement partnership, one key issue is to create a better understanding of the differences and expectations between the actors. In addition, it is indicated that due to the dynamic nature of institutions, collaboration between the actors in an innovation procurement partnership might also result in institutional change.

Without previous research on the empirical phenomena to build on and limited resources for our research, it follows that this is a preliminary study with several limitations. However, we believe we have contributed with relevant theoretical and empirical insight, which can provide some foundation for future research and development.

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1.0 Introduction and Research Question

In prosperous countries such as Norway, with comprehensive welfare systems, many of the population's needs are fulfilled by the public sector (Christensen & Berg, 2018). The result is that the public sector is a very important part of the market, if not the most important, in many industries. The public procurement of goods and services is, therefore, an important factor for development for many private organizations. Looking into the future, there is a demand for innovative solutions in order to respond to the efficiency needs in a rapidly changing world (Mark et al., 2015). With the rapid development of technology, there is a wide range of possibilities to develop efficient solutions in order to handle social issues and new demands. One of the challenges in regards to innovation in some industries are bureaucratic, rigid, and resource demanding public procurement processes (Uyarra et al., 2014; Edler & Georghiou, 2007). This barrier to innovation is especially evident in sectors such as the health care sector where the public sector normally is the first user of services (Uyarra et al., 2014).

Over the last years, the OECD average of public procurement in a percentage of GDP has been stable at around 11.9 percent (OECD, 2017). Historically, this percentage in Norway is above OECD average, and in 2016 Norwegian public procurement accounted for NOK 500 billion, 16 percent of GDP (SSB, 2017a). The EU has officially recognized the potential of public procurement as a driver for innovation and in 2014 new directives regarding public procurement was created. As a reaction to the new EU directives, the concept of innovation procurement partnership was introduced in Norway, in January 2017 (Europalov, 2017). Innovation procurement partnership is a procurement framework which provides the public sector with new mechanisms for procuring innovative solutions (Difi, 2018a). An innovation procurement partnership involves a comprehensive investigation of the need the innovation aims to fulfill. The supplying organizations deliver a tender based on their idea for a potential solution to fulfill that need, and the idea is then developed in cooperation between the procuring actor(s) and supplier(s).

Our aim is to investigate innovation procurement partnerships in an empirical setting and contribute to an increased understanding of the phenomenon. This includes looking into innovation in the interface between public and private sector. Our study is preliminary, as the first innovation procurement partnership in Norway is scheduled to be finalized in January 2020 (Difi, 2018b), making the practical implementation of the framework at an early development stage. At the starting point of our research, there were only two instances of innovation procurement partnerships in Norway, both occurring within the health care sector. As a consequence of this, the context for this thesis is the Norwegian health care sector.

The theoretical foundation for our thesis is based on the institution based view of strategy. While defining institutions as humanly created constraints (Peng et. al., 2008), the theory emphasizes that the institutional context of an organization affect strategic choices and behavior (Powell & DiMaggio, 2012). We believe this theory is of particular interest as there are many institutional forces that interacts in the situation of public-private cooperation. Public procurement, in general, are highly regulated, and these regulations will affect the organizational behavior of any actor involved with public procurement. The framework of innovation procurement partnership is a regulative institution, and would not exist if it was not implemented by law. Further, institutions encompass all normative and cultural aspects (Scott, 2001). A partnership regarding innovation in the interface between public and private sector will involve interaction between different norms and cultures. We therefore believe a study based in the institution based view can contribute to a better understanding of public-private collaboration and innovative procurements by focusing on their institutional context.

We have chosen an explorative, qualitative research design for our thesis. As the main objective of an innovation procurement partnership is to increase the cooperation between the private and public sector with the intent of creating innovative solutions to meet future demands, this leads us to the following research question:

How can innovation procurement partnerships contribute to innovation between public and private sector?

As our research question is comprehensive, several aspects have been explored in order to answer our research question. First and foremost, we have explored which factors are considered important for private organizations in the context of innovation procurement partnerships and which institutions that are present. After identifying relevant concepts regarding the phenomena in our research, three aspects of the innovation process are identified as essential and affected by institutions; the development of an idea, risk and uncertainty, and cooperation. These aspects led to three sub-questions related to our research question;

1. *How can an innovation procurement partnership facilitate the development of a new idea?*
2. *How does innovation procurement partnership address the element of risk and uncertainty?*
3. *How can innovation procurement partnership facilitate for public and private sector cooperation?*

To limit the scope of our research we emphasize the private sector's perspective in our research. This is reflected through our choice of interviewees, which mainly includes private organizations and facilitators. Evald and colleagues (2014) point out that the current research on private public innovation (PPI) mainly focus on the development activities of the process, in addition to the management of public-private relationships. Few researchers address public-private innovation relationships from the private perspective. In addition to exploring the private perspective, we hope to develop a deeper understanding of innovation procurement partnership as it currently exists little empirical research on the phenomena. Our goal is to point out managerial implications for the execution of innovation procurement in the future. Further, we hope to contribute with insight on the phenomenon that can provide some indicators for future research.

The thesis is structured in the following way: In chapter two we present and elaborate on the theoretical foundation and analytical framework. Chapter three provides an understanding of the Norwegian health care sector, its structure, and

challenges. We elaborate on how the changing demographics results in altered and increased demands for services. Next, we present and argue for our chosen methodology in chapter four. Chapter five consists of a description of our case study. We elaborate on the background and development of innovation procurement partnerships and analyze which stakeholders who are involved. Further, we present the two projects included in our data; the Stavanger-project and the Oslo-project. Our empirical findings are presented in chapter six, followed by a discussion, based on our research question and the theoretical foundation, in chapter seven. Finally, we present our conclusion and practical implications in chapter 8, followed by chapter 9 including limitations and suggestions for future research.

2.0 Theoretical Foundations

This chapter introduces the theoretical foundation of the thesis, innovation, and the institution based view. The aim of this chapter is to present a review of relevant theory and concepts within the theory, as well as describing the analytical framework for our thesis. Innovation theory is presented to get some insight into the concept and mechanisms of innovations, as this is a fundamental part of an innovation procurement partnership. The institution based view is used as an overall theoretical lens to contribute to identifying enablers and barriers to innovation in the context of innovation procurement partnerships.

2.1 Innovation, the Innovation Process and Risk

Innovation is a complex concept and the purpose of this thesis is not to elaborate the field of innovation literature. However, innovation and the innovation processes still need to be acknowledged. This as the creation of innovative solutions are the core purpose and goal of an innovation procurement partnership and can be considered as the main value creation of the partnership. It is important to consider the different aspects of innovation in the context of innovation procurement partnerships.

2.1.1 The Concept of Innovation

Innovation is a cross-disciplinary phenomenon that can be studied through several different strains of research, such as political science, technology, and economy. Innovation influences several aspects of our society, by developing the way things work it creates ripple effects. Without excluding the importance of other aspects, our intent is to emphasize the economic and business aspect of innovations.

The concept of innovation can be defined as “the invention, development, and implementation of new ideas” (Garud et al, 2013, p. 774). According to the Norwegian Government, accept and use of a new idea or invention, the implementation is critical to qualify as innovation (Regjeringen, 2018), which is a definition supported by research (Garud et al, 2013).

Innovations are often recognized to be either a radical or incremental innovations. A radical innovation is recognized as an innovation that “represent revolutionary change in technology” and “contain a high degree of new knowledge” (Dewar & Dutton, 1986, p. 1422). In contrast, an incremental innovation is recognized as “minor improvements or simple adjustments in current technology” (Dewar & Dutton, 1986, p. 1422-1423). Both types of innovation require an extensive knowledge depth, but larger firms are more likely to adopt radical innovations (Dewar & Dutton, 1986). A unique organizational strategy is required to succeed with radical innovations, where traditional strategy is often sufficient with incremental innovations (Ettlie et. al., 1984). However, the support within the organization is important to consider. Radical innovations require centralized decision making, indicating support from the top managers (Ettlie et. al., 1984).

Different types of innovation can be categorized as product innovation, market innovation, process innovation, or organizational innovation (Zahra & Das, 1993; Hoholm & Huse, 2008; Regjeringen, 2018). The invention of “new products or services to a market” classifies as product innovation (Regjeringen, 2018). Market innovation happens when “new markets open up for products or services”. Process innovation is “new ways to manufacture or distribute products or services”, and lastly “new and smarter ways to organize work tasks” classifies as organizational innovation (Regjeringen, 2018).

Innovation can originate from different sources of innovation (Zahra & Das, 1993; Hoholm & Huse, 2008). For organizations, both public and private, the innovation can be seen as steaming from both internal and/or external sources, with drivers such as technology, price competition, and customer needs. Basing innovation on customer needs can be seen in relation to user-driven innovation, which was introduced by Professor Von Hippel in the late 1990s as “innovation created by the user to obtain a higher user value as opposed to commercial innovations taking place within companies.” (Rosted, 2005, p. 4). User-driven innovation has been recognized and explored since then, and are strategically used in the design process to create products that the consumer wants (Understanding user-driven

innovation, 2006). However, two challenges regarding user-driven innovation are pointed out by De Moor and colleagues (2010), “the challenge of continuously involving the user and the need for tools to facilitate the integration of knowledge into the increasingly interdisciplinary development process” (p. 51). It is also important to keep in mind that users are not necessarily innovative, meaning one needs to find a “sensitive interactive environment for the adaptation of some radical new technologies” (Oudshoorn & Pinch, 2008, referenced in Hoholm, 2009 p. 28).

If one goes further into the dimension of the origin of innovation there are several schools of thought as to how organizations discover entrepreneurial opportunities and exploit these (Companys & McMullen, 2007). Companys and McMullen (2007) found that the economic school views the source of entrepreneurial opportunities as resources and capabilities and how the information about these are distributed. Meanwhile, the cultural cognitive school argues that the knowledge and cognitive templates for interpreting the opportunities embedded in the environment are the sources. Lastly, the sociopolitical school argues that the governance structures and network structures create entrepreneurial opportunities.

2.1.2 The Innovation Process

In everyday life, an innovation is often referred to as an outcome, but many researchers acknowledge innovation as a complex process that occurs over time (Garud et al, 2013; Hoholm, 2009). The innovation process has been a subject of much research, but there does not exist any consensus on its content or a general description that can provide a recipe for innovation. However, existing research provides some foundation for understanding key features of the innovation process. In their literature review, Garud and colleagues defined the innovation process as “sequence of events that unfold as ideas emerge, are developed and are implemented within firms, across multi-party networks, and within communities” (Garud et al, 2013, p. 774). This indicates that the elaboration of an idea and a common acceptance of the idea as key elements in the innovation process. A key feature is that the innovation process unfolds in a nonlinear and cyclical manner, with iterative phases that change between divergent and convergent phases.

Expenditures of resources such as time, people, financial resources, and ideas are drivers for divergence. Exogenous constraints, such as institutional rules and organizational mandates, are drivers for convergence together with endogenous constraints such as “resource limitations and the discovery of possibilities that focus attention” (Garud et al, 2013, p. 776).

As a part of the innovation process, one need to scope an area for the innovation, commonly done through a demand analysis. Different tools and methods have been used throughout times in order to do such analysis, but as the future is unknown, one can never be entirely sure of the success of the innovation in the market. It is therefore important to create estimates and forecasts of different situations for the future, in order to strengthen a demand analysis ahead of an innovation (Wold & Jureen, 1953).

The innovation process is found not to be limited to the inside of the organization, but to occur on different levels as an interaction of different forces and elements (Garud et al, 2013; Hoholm, 2009). Garud and colleagues (2013) argue that innovation occurs on three different levels: firm-level, multi-party networks, and within communities. Defining firms as legal entities that nurture new ideas through different mechanisms and resources, such that innovations emerge. Multi-party networks are defined as “constellations of firms that interact with one another to invent, develop, and implement innovations” (Garud et al. 2013 p. 777). The communities consist of public and private actors, where their diverse interest and roles are creating an infrastructure for the innovation. It is stated that the innovation process unfolds differently across these levels. Research argues for considering the market as an internal factor in the innovation process, as the users can contribute to modifications and affect the fate of the invention (Hoholm, 2009).

Risk and Uncertainty in Innovation

The terms “risk” and “uncertainty” are often used interchangeably, despite describing different concepts. According to the dictionary, uncertainty is “a situation in which something is not known, or something that is not known or

certain” (Cambridge Dictionary, 2018a), while the term risk is “ the possibility of something bad happening” (Cambridge Dictionary, 2018b). In economics, it is common to use the term “Knightian uncertainty”. In a simplistic way, the risk is different from uncertainty in the way that risk is measurable or quantifiable, while uncertainty is simply the lack of knowledge of future events (LeRoy & Singell, 1987). The uncertainty creates risk through the commitment of limited resources to pursue entrepreneurial opportunities, with limited or no opportunities to retrieve the resources if a better opportunity is found in the future (Wickham, 2006).

In their review, McMullen and Shepherd (2006) found that there are three different types of uncertainty; state uncertainty, effect uncertainty, and response uncertainty. State uncertainty indicates an unpredictable environment, effect uncertainty concerns the unknown future, and response uncertainty covers the unpredictability of response options.

When discussing the innovation process, the terms risk and uncertainty are essential. The presence of uncertainty in the innovation process can be explained by several key features (McMullen & Shepherd, 2006). Because the process is contiguous and evolves over time, it will inevitably involve some degree of uncertainty as the future is unknown. In addition, the uncertainty stems from the creation of something novel, in addition to the interaction of several forces and actors (Hoholm, 2009).

The degree of uncertainty present will have an effect on the innovation process (McMullen & Shepherd, 2006; Companys & McMullen, 2007) and it is, therefore, an important task for the participants in the innovation process to properly manage uncertainty (Hoholm, 2009). However, entrepreneurs tend to be more risk-willing than others (McMullen & Shepherd, 2006). There exist several frameworks on how to manage risk and uncertainty (Chapman & Ward, 2011). A common procedure for the frameworks regarding risk management consist of establishing the context, identifying risks, evaluate risks, plan risk responses, and lastly to monitor and control risks (Chapman & Ward, 2011). Looking into uncertainty management organizational learning, organization culture, human resources

capability, and decision support are important. The challenge within both risk and uncertainty management lies within the information available. It is desired to obtain as much information as possible to reduce the risk, while you do not want to focus on unnecessary information.

2.2 The Institution Based View

To research and increase our understanding of innovation procurement partnerships, the lense of the institution based view is used. The institution based view in the strategic field is based upon the idea that the organization's decisions and actions are influenced by institutions, which can be defined as “the humanly devised constraints that structure human interaction” (North, 1990, p. 3, referenced in Peng et. al., 2008). This theoretical foundation directs attention to the context and the macro environment of the organization, which is of particular interest when looking at the innovation procurement partnership. This as several of the challenges within the public procurement process and the Norwegian health care sector are related to different institutions, such as culture and legal regulations.

2.2.1 The Institution Based View and Organizations

Researchers within the field of strategy have since the 1990s argued that formal and informal institutions affect strategic decisions within an organization (Powell & DiMaggio, 2012). It is stated that the behavior of organizations is a result of informal and formal rules of the game (Peng et. al., 2009). Businesses who understand the rule of the game succeed, while those who do not, fail. The choices organizations make are a result of their understanding of their surrounding institutions. Peng (2002, p. 253) define the institution based view as “an institution-based view on business strategy (...) focuses on the dynamic interaction between institutions and organizations, and considers strategic choices as the outcome of such an interaction”. The theory thus addresses strategic choices, which are viewed as a result of the organization's interaction with its institutional environment. The institution based view came as a reaction of a missing element when looking into strategy, concerning the components that could not be broken down to firm capabilities and industry composition (Peng et al., 2008).

In regards to the institution based view, legitimacy is an important term. It is by Suchman (1995) defined as: “a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman, 1995, p.574). Further, Suchman (1995) defines two directions of the view of legitimacy, strategic and institutional, while criticizing previous research for not clearly situating their work by defining their view on legitimacy. While the strategic literature’s perspective on legitimacy considers it as an outcome and something that needs to be managed, the institution based view of legitimacy considered it as constructing the organizations and its actions (Suchman, 1995). In our thesis, we will take a middle stand between the two perspectives, as Suchman did in his review (1995). By this, we acknowledge that organizations take actions to manage their legitimacy while emphasizing that the external institutions to a large extent construct and form the behavior of the organizations.

The literature on the institution based view presents several examples of how institutions affect organizational behavior. The institution based view is found to explain the heterogeneity amongst firm, how they are structurally alike (DiMaggio & Powell, 1983). It is found that this phenomenon of isomorphism occurs because of normative pressure from the external environment. This pressure to conform to institutional norms can stem from a variety of sources, including the government and dominant organizations. Other sources can be the broader normative environment or professional norms and standards (Dacin, 1997). In her study, Dacin (1997) found that normative and cultural institutional forces have an effect on the organization’s entry process.

In another perspective, research points to examples of how organizations aim to manage legitimacy and their institutional context. Oliver (1997) stated that the competitive advantage depends on the organization's ability to manage its resources in light of the institutional contexts. Research also suggested that institutions and the organization's need for legitimacy can be a driver when entering an alliance (Dacin et.al, 2007). The choice of the right partner(s) for an

alliance can fulfill a specific need for legitimacy. For instance can an alliance with an established and recognized actor when entering a new market contribute to the gain of legitimacy in the eyes of relevant stakeholders.

Institutional Systems

The strategic term of institutions covers a wide range of aspects forming organizations behavior. Scott (2001) suggest three systems of institutions in regards to strategy; regulative, normative, and cultural-cognitive. Regulative institutions can be laws, rules, incentives, and sanctions, where legal prosecution awaits if it is broken. Normative institutions are morally governed and could, for instance, be certifications or accreditations, typically what are recognized as norms. Cultural-cognitive institutions are harder to recognize, as it is based on shared understandings within a culture or institutions that are taken for granted, typically recognized as the shared logic of actions. If cultural-cognitive institutions are broken, others might find the actions to be strange, but no legal actions will follow. However, the legitimacy approval from the three systems may not be equally important but vary depending on the industry, time, and place (Lu et al, 2008; Dacin et. al., 2007). For instance, the regulatory legitimacy is essential in the pharmaceutical industry, but cultural-cognitive legitimacy would most likely be higher weighted in the fashion industry.

In regards to these three definitions of institutional systems, an interesting aspect is the blurry lines of where one institutional system start and end. Several of the newer and highly cited articles contributing to the institution based view is based on research conducted in an Asian context (Lu et. al, 2008; Peng et.al, 2009; Tang, 2010). Much of the emphasis is painting a picture of institutional systems on a geographical base, without excluding variances within industries. According to the threefold of institutions defined by Scott (2001), a logical assumption is that the variation of the regulative institutions, such as laws, would be limited within geographical areas, where normative and cognitive institutions would be more limited to industries. This implies that different public sectors within a country can have several normative and cognitive institutions separating them, even though they are guided by the same regulative institutions.

An important aspect of institutions is how they change. Seo and Creed (2002) emphasize the important fact that institutions are not stable, they are dynamic. Institutions are subjected to change over time, by several mechanisms. They defined the process of institutional change as an alteration of praxis that occurs because of factors such as inefficiency, non-adaptability, institutional incompatibilities, and misaligned interests. This altered praxis will occur in social interactions and can lead to an institutionalization of new behavior. In addition, Seo and Creed (2002) emphasize that organizations are not passive actors, but they are humanly constructed institutions.

2.2.2 The Institution Based View and Innovation

The institutional context affects innovation and long-term economic development of organizations (Lu et.al, 2008; Tang, 2010). This is in line with the definition of innovation occurring on different levels as an interactive process with its environment (Morgan, 1997, Van de Ven, 1986). There are, however, different theories as of how this effect occurs and the consequences in regards to innovation.

Lu and colleagues (2008) emphasize the governmental role in ensuring policies for innovation, as well as the interplay between the organization and its surroundings. They suggest that institutional environment influences innovation strategies in three different ways; (1) rules of legitimacy, (2) the source of knowledge, and (3) the allocation of resources and incentives for innovation (Lu et. al., 2008). In order for an organization to innovate, it is important to obtain an understanding of the institutions in their surroundings. Simultaneously, governments and communities surrounding the organizations need to adjust the society in accordance with needs of organizations, for firms to be able to innovate (Lu et. al., 2008).

In regards to regulative institutions, Morgan (1997) emphasizes that they should consist of more policies that aim for increasing knowledge capacity. His study is addressing the EU regional governments policies to ensure innovation and

development on a regional level. It is advocated on basis that the traditional policies on a national level often focus on expenditures on research and technology, but the same level of inputs in regards to this has proven to give different outputs. Thus, there must be other factors involved. Further, Morgan (1997) argues for the importance of cultural institutions. He states that it is through these institutions that an organization can create and obtain social capital, such as trust. This social capital “facilitate coordination and cooperation for mutual benefit” (Morgan, 1997, p. 493), and it is argued to be crucial in economic development.

A study by Tang (2010) emphasizes the importance of infrastructure to foster innovation for the discovery of entrepreneurial opportunities. As an example, Chinese entrepreneurs suffer as institutions related to infrastructures, such as information, governmental policies, and regulations, are inefficient. This is seen as a hinder towards the discovery and exploration of entrepreneurial opportunities (Tang, 2010). In order to discover these opportunities, entrepreneurs need to consider the entire society, including both internal and external characteristics, instead of solely focusing on one factor that hinders the opportunities (Tang, 2010). This view of entrepreneurial opportunities as embedded in governance structures and network are in line with the view of the sociopolitical school defined by Companys and McMullen (2007), explained in 2.1.1.

Ruttan and Hayami (1984) presents a different view on institutions and innovation, and suggest that institutions themselves can be a subject to innovation. By using the agricultural history as an example, they state that changes in technology and resource endowments have led to change in institutions such as property rights and market development. They argue for viewing the institutions as an endogenous variable that responds to technology and resource endowments, such as the end of feudalism and increasing demands for food affected the ways of agriculture.

In line with innovation affecting institutions, Swanson and Ramiller (1997) point out that the implementation and diffusion of innovation would include the

institutionalization of the new idea. They propose that this institutional process occurs through institutional mechanisms that result in “the creation of a collective image of the innovation” (Swanson & Ramiller, 1997, p. 470). This image is created within the innovating organization and diffused further because of interorganizational social interactions. The institutionalization occurs when there is social acceptance of the innovation and there is normative pressure to adopt it.

In accordance with this, Van de Ven (1986) emphasizes the importance of institutionalizing the new idea: “An invention or creative idea does not become an innovation until it is implemented or institutionalized.” (p. 604). By this, Van de Ven states that innovations have to adapt to the existing organizational and industrial institutions, but they also change those institutions. He addresses the management task in light of innovation and the institutional context. Van de Ven (1986) defines the external context of the organization as including laws, government regulations, distribution of resources and knowledge and the structure of the industry. Encompassing the internal organization as institutions as well, he argues that the leaders must create a cultural context which promotes innovation. It is, therefore, possible to see the relationship of innovations and its surrounding institutions as dynamic, where the innovation have to adapt to the institutional environment, while also contributing to changing them by creating a acceptance of a new invention.

2.3 Analytical Framework

Several factors can be relevant in regards to innovation procurement partnership, looking at how institutions and innovations affect each other. When looking at innovation procurement partnership, several institutions are challenged, from all of Scott’s (2001) pillars. The changed laws and regulations address the regulative institutions, where new ways of doing things relate to the normative and cultural-cognitive pillars of institutions.

During our research institution based view will be used to understand how public-private cooperation and innovation procurement partnerships are influenced by institutions. Scott’s (2001) pillars will be used to identify different

institutions present in an innovation procurement partnership. We will use the different types of institutions to understand their roles and which are most influential. In addition, our research addresses the potential changes of institutions. When using the institution based view as an analytical framework, legitimacy is essential and is considered as a driver for behavior. The conformity of behavior after institutions are also a mechanism included in our analytical framework. In this chapter we have identified governmental policies, the infrastructure for discovering entrepreneurial opportunities, the institutional context surrounding the organization, and the institutionalization of the innovation as relevant institutional mechanisms. Through these mechanisms from institution based view we will analyse the framework of innovation procurement partnerships in light of our collected data and identify enablers and barriers for public-private cooperation and innovative procurement in this context.

As innovation is an essential part of an innovation procurement partnership we have looked into what an innovation actually is and key elements in the process. This will be used to evaluate how the innovation procurement partnership can be used to create innovative solutions by evaluating how the framework address some of the key elements of the innovation process. We will emphasize how the framework can contribute or hinder the discovery, development and implementation of an idea, in addition how innovation procurement partnerships address the risk and uncertainty present when innovating in a public-private collaboration .

3.0 The Norwegian Health Care Sector

This study address innovations in the interface between public and private sector, in the context of the Norwegian health care sector. To better understand the innovation procurement partnership, it is important to keep in mind the context where the empirical data is collected. This chapter provides an elaboration of that context by clarifying the terms and concept used further in our study. In addition, we have outlined an image of the increasing demands for health care services, and how innovations are managed today. We have aimed at describing the current situation in the Norwegian health care sector by including a short description of a complex reality.

3.1 Defining The Norwegian Health Care Sector

For the purpose of our thesis, the health care sector includes both the public and private health care sector. Public health care sector includes the services provided through the public welfare system, financed by the government. Private health care sector consists of all health care services available for private purchase. In addition, these definitions encompass the health care industry in our thesis, consisting of related industries; pharma, diagnostics, health ICT, MedTech and welfare tech (Jakobsen et al, 2016).

Norway has a well developed public health care sector as a part of the country's comprehensive welfare system. The Norwegian health care sector is ranked fourth by the European health consumer index (Björnberg, 2017), thus recognizing it as one of the best in the world. The largest obstacle in the Norwegian health care sector and the reason Norway loose ranks compared to other European countries are the waiting lists (Björnberg, 2017). Mismanagement is seen to be the largest reason for this, as Norway has a lot of financial resources. An abundance of financial resources in the health care sector can be a curse, as it hinders the learning of efficient logistics and rationalization, leading to waiting lists (Björnberg, 2017). The strengths of the Norwegian health care sector are patient rights and information, outcomes, and prevention, where Norway score highest

among the European countries. This is most likely related to Norway being a rich country, as richer countries tend to treat more diseases (WHO, 2016).

According to OECD, Norway ranks fourth amongst the OECD countries on health care spending per capita (OECD, 2016). In 2016 the total health care expenses in Norway were NOK 326 billion and accounted for 10.5 percent of GDP (SSB, 2017a). This amounts to an average health care expense of NOK 62,186 per inhabitant. In Norway, the health care expenses are mainly covered by the public. In 2013 the public covered 84 percent of the total health care spending, and this number has been stable since the mid 90's (Helse- og omsorgsdepartementet, 2014a). Compared to the rest of the world, Norway has the largest amount of its workforce working within the health care sector, with every fifth employed person working within the health care sector (OECD, 2017). With the amount of resources allocated to the Norwegian health care sector, different approaches are made to improve the sector. In order to get more out of the resources invested in the health care sector, it becomes more common to recruit individuals with mathematical backgrounds to look at the alternative use of the resources (Christensen, 2015).

The Norwegian public health care sector consists of two types of services; the primary and the specialist health care services. The primary health care services are administered by the Norwegian municipalities and include health centers, after-hours care, and primary physicians. Hospitals, specialty physicians, and rehabilitation centers are included in the specialist health care services which are administered by four regional authorities. Including both services, the Norwegian population had 4.3 doctor consultant per capita in 2015 (OECD, 2015). Despite high spending on health, an international study found that a large percentage amongst the population is generally unsatisfied with the Norwegian public health care services, due to factors such as waiting time to see a specialist and coordination between institutions (Folkehelseinstituttet, 2016).

3.1.1 The Challenge of Increasing Demands

The general health of Norwegians are good, but the part of the population with higher education tend to have a slightly better health (SSB, 2017b). In regards to risk factors, such as smoking, obesity, and alcohol, Norway generally does well (Morgan et al., 2017). The average life expectancy is 84.2 years for women and 80.6 for men born in 2016. However, in parallel with an aging population, there is an increase in noncommunicable diseases. Today, 80 percent of Norwegians die from cancer, cardiovascular diseases, type II diabetes, or chronic obstructive pulmonary disease (COPD) (Innovasjon Norge, 2016). This is higher than the rest of the world, where noncommunicable diseases account for 70 percent of the deaths and are increasing (WHO, 2017). Cardiovascular diseases, cancers, respiratory diseases, and diabetes account for over 80 percent of all premature deaths caused by noncommunicable diseases in a global perspective.

There have been evident changes in the Norwegian health care services over the last years. A decreasing amount of individuals receive treatment in institutions, and simultaneously there is an increase in the home care service. Single rooms in institutions have increased, and so has the quality of the institution treatment. In addition to the increasing number of sick and elderly individuals receiving home care services, there is an increase in how much help they receive at home (Borgan, 2012). Research shows that patients prefer treatment in their home municipality, in contrast to being sent to regional hospitals further away from home (Leonardsen, 2017). Lack of suitable treatment in the municipalities pressures the capacity of the regional hospitals. Norway's newest and most modern hospital, the hospital of Østfold, has been criticized for placing several patients in the hallways. The hospital puts some of the blame on the municipalities, for not being able to take care of patients that are healthy enough to be discharged (Braathen, 2018; Nrk, 2018).

The part of the population aged 80 years and older, amounted to 40 percent of the users of the primary health services provided by the municipalities in 2016 (SSB, 2017c). Amongst this age group, 7 out of 10 use public home care services. In

2016 this segment accounted for only 4.2 percent of the Norwegian population (SSB, 2017d). It is expected that the corresponding number will be 11.7 percent of the population in 2100 (Folkehelseinstituttet, 2017).

The aging population brings several challenges into the health care sector. There will be relatively fewer workers to take care of the sick and elderly, and fewer individuals that contribute to the welfare systems (WHO, 2016). The UN and EU point out these challenges and state that innovation and new ways to treat patients are crucial in order to succeed in the health care sector of the future (Gjessing-Johnrud, 2016). As 20 percent of the workforce today work within the health care sector, this number is expected to increase in the future if new solutions are not found (OECD, 2017).

3.2 Initiatives for Innovation in the Health Care Sector

There is a difference between innovating in private and public sector (Osborn & Brown, 2013). Osborn and Brown (2013) introduces three overall flaws of innovation in public sector; “a flawed understanding of the nature of innovation, the positioning of innovation as a normative “good” in public policy and resultant prescriptive policymaking, and the adoption of an inappropriate model of innovation from the manufacturing, rather than the services, sector” (p. 2). These flaws are a result of years of political focus on other aspects than innovation, and a generally poor understanding of what an innovation actually is among the public sector (Osborn & Brown, 2013).

Several aspects make up the context for which decisions are made within the public sector, where institutions are one of them (Osborne & Brown, 2013). Ideas, expertise, interests, and values are other aspects pointed out, leaving rigorous research-based knowledge out of the core of decision-making. Looking into the value of a public-private innovation relationship, the general value is often recognized as the ability to develop new welfare solutions, combining knowledge from the private and public sector (Evald et. al., 2014).

3.2.1 Innovation in the Norwegian Health Care Sector

There has been a rapid development in the health care treatment since the 1800s. The life expectancy has more than doubled from 40 years to over 80 years over the last 200 years (Folkehelseinstituttet, 2015). Hygiene, vaccination, and antibiotics are the main reasons for this. The development within the Norwegian health care sector has changed towards more incremental development since laws and regulations regulating treatment were created during the 1960s. Over the last decade, a more aggressive approach has been present from the Norwegian Government in order to meet the challenges of increasing and changing demands for the health care sector. In 2007, the Norwegian Government launched an initiative towards innovation within the health care sector, “Need-Based Innovation” (Damvad & Oslo Economics, 2011).

“Need-Based Innovation” is a ten step guide to follow when innovating within the health care sector. The main concept of “Need-Based Innovation” regards actively using the information from the users when developing new products. The idea behind the guide was that the users of the health care sector are perceived as experts on their situation. This makes their information and insights important in an innovation process. As of 2014, when applying for funds from the Research Council of Norway, research projects within the health care sector excluding the users, most commonly the patients, from the research process need to elaborate on the reason for doing so (Røsjø, 2014). Without this elaboration, their application is not valid. Research supports this by confirming that developed systems are improved and more valuable if they are developed in cooperation with the users (Leknes, 2016). On the other side, research shows that involving the users in developing their treatment or new systems, might cause stress and uncertainty (Gulbrandsen et. al., 2016). The patients often end up with what they were told was the best option by the professionals in the beginning, resulting in a lot of wasted time, with the exact same outcome.

One of the newest programs within the Norwegian health care sector, was initiated during the spring of 2013, by the Ministry of Health and Care Services, known as

“HelseOmsorg21 (HO21)” (Helse- og omsorgsdepartementet, 2014b). The goal of HO21 was to contribute to a knowledge-based health care sector, recognized for high quality, patient safety, and efficient services. When innovation procurement partnership was established by law in 2017, this was a concept used in the process to achieve this goal.

3.3 Composition of the Norwegian Health Care Sector

The Norwegian public health care sector consists of a complex composition of organizations and units. An increased complexity of social tasks through history has led to organizing the work in different departments, units, and divisions on all levels (Gjessing-Johnrud, 2016). As new solutions require cooperation between the different actors, new challenges occur.

Decisions and strategy need to occur on a higher level, but bureaucracy tends to slow the processes (Fivelsdal & Sterri, 2018). Bureaucracy is a description of the public control and put political decisions to action (Fivelsdal & Sterri, 2018). The word has several meanings, but are often referred to in a negative setting, indicating that public sector is too big and slow in their decision making. Profits and costs fall on different actors, and the need to decide which budget to affect can be a challenge. Looking into employees of the public sector, there has been a steady increase over the last decade, indicating an increase in the bureaucracy (Skihamn, 2017).

A traditional conflict in the Norwegian health care sector is a lack of cooperation between the primary health services and the specialist health services. Privacy concern makes development within the health care sector challenging, as there are lots of sensitive data involved. A recent report shows that security and privacy concern are the main reason digital health tools are not broadly embraced (Change Healthcare, 2018). In summary, cultural, economic, organizational, political, scientific, and technological factors challenge the efficiency of innovation within the health care sector (Gjessing-Johnrud, 2016). Another challenge with innovation within the health care sector is that the development time in the sector

is long. This makes it an industry with high costs and large risks associated with innovation (Jakobsen & Amundsen, 2016).

There is high conscious regarding these challenges, and politicians have signalized a desire to overcome them (Gjessing-Johnrud, 2016). One important aspect in order to accomplish this is for the public sector to see the private sector as a collaborating partner instead of a competitor. In addition, the public sector needs to recognize innovation as a tool to do more with the same or smaller amount of resources. These aspects go hand in hand and are important as private organizations stand free to use new technology and have larger economic incentives, while the public sector has the power to commercialize a product (Gjessing-Johnrud, 2016).

3.3.1 Funding of Research and Development

In Norway, medical and health-related research and development are mainly publicly financed (Forskningsrådet, 2014). Looking towards the world, Norway has the second largest public investments in research and development related to health. Taking the private numbers into account and looking at total investments related to research and development within health, Norway ranks 20th, as many countries have a large portion of privately funded research and development (Forskningsrådet, 2014).

InnoMed is a national network established by the Norwegian Directorate of Health, to share competence of need-based innovation in the health care sector. It focuses on value creation within the health care sector for patients and the society (InnoMed et. al., 2017). Studies emphasize the potential for decreasing costs for the society if individuals do not get sick, or if one manages to get older before getting sick (Gjessing-Johnrud, 2016). As an example, a treatment that delays development of dementia with five years would relieve the British health care with 566,000 full-time equivalents and reduce their treatment expenses with 21 billion British Pounds. If the progression of Parkinson disease was reduced by 20 percent in Germany, the German government would save 4 billion Euro until 2040 (Gjessing-Johnrud, 2016).

Considering these challenges and opportunities, the long-term plan for the Norwegian Government's research and development program put importance on the need to work towards the society's challenges and emphasize health care (Gjessing-Johnrud, 2016). A large potential market for private actors is found around the globe, as every person on the planet demands good health. In addition, it is expected that the next generation of elders will have a better economic foundation to take care of their own living- and caring needs than earlier generations (Gjessing-Johnrud, 2016).

4.0 Methodology

Our research question is as follows: *How can innovation procurement partnerships contribute to innovation between public and private sector?* In order to answer this, we will use a qualitative approach, consisting of a case study of the phenomenon of innovation procurement partnership in the Norwegian health care sector. This chapter elaborates and consider on our chosen methodology and how we aim to ensure quality in our research.

4.1 Research Design

For the purpose of this study, the most appropriate research method is a qualitative approach. Denzin and Lincoln (2011, p. 3) define qualitative research as “a situated activity that locates the observer in the world. (...) This means that qualitative research study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them.” Typically, qualitative research is associated with words instead of numbers, as it “offer insight into complex social processes that quantitative data cannot easily reveal” (Eisenhardt & Graebner, 2007, p. 26). As innovation procurement partnership is a new phenomenon, insight into the processes is valuable and what we aim to obtain. In addition, qualitative research arranges for a flexible and open design (Corbin et. al., 2014). The exploratory opportunities inherited in a qualitative research design answers to the aim of increasing an understanding of a phenomenon, which is needed when studying innovative procurement partnership. We expect to end up with a rich data collection which we interpret and sort based on our theoretical foundation. One of the goals of our research is to provide some indicators for future research on which concepts and elements who could be interesting to investigate further.

4.1.2 Case Study

A case study will be the research design for our master thesis. A research design is defined as the framework for collecting and analyzing data that reflects how the different dimensions of the research process are prioritized (Bryman & Bell,

2015). Case studies can be described as “rich, empirical descriptions of particular instances of a phenomenon that are typically based on a variety of data sources” (Yin, 1994, referenced in Eisenhardt & Graebner, 2007, p. 25). Cases are not representable for a whole population but can provide insight and knowledge (Eisenhardt & Graebner, 2007), which is the aim of this study. A case is to be studied in detail to develop as much understanding as possible (Silverman, 2013) and in-depth case studies create the best possibilities for understanding a phenomenon and its context (Dubois & Gadde, 2002).

One of the most well-known advocates for using case studies are Eisenhardt (Eisenhardt & Graebner, 2007) and Yin (1994, referenced in Eisenhardt & Graebner, 2007), who contributed to the legitimization of case studies as a research method. However, in this research, we seek to follow the approach towards case studies advocated by Dubois and Gadde (2002; 2014). The two researchers suggest an approach to case research named systematic combining. Systematic combining is closer to inductive reasoning than deductive reasoning but is defined as an abductive approach, thus using abductive reasoning. Abduction is about “investigating the relationship between everyday language and concepts” (Dubois & Gadde, 2002, p. 555). The approach is beneficial in cases where the researchers objective is to explore and discover new things instead of confirming existing theories (Dubois & Gadde, 2014). Following an adductional approach in our research we have gone back and forth between theory and empirical observations as our understanding of theory and the phenomenon in question developed during the research process. This answers to the overall purpose of our thesis, where there exists little research as a basis for theoretical hypotheses. When using systematic combining in research, the theory is viewed as a starting point and a contribution to creating “an initial image”, but not “a fixed representation” (Dubois & Gadde, 2014).

Systematic combining takes into account the simultaneous evolution of the case study, theoretical framework, and empirical fieldwork. This approach acknowledges that the sequential and linear methodology presented in the majority of existing case study literature is less realistic in practice. Instead,

systematic combining is described as “a nonlinear path-dependent process of combining efforts with the ultimate objective of matching theory and reality” (Dubois & Gadde, 2002, p. 556). This gives room for the movement back and forth between theory and practice that is necessary to understand and create a theory for a new phenomenon such as innovation procurement partnerships.

In addition to a non-linear approach, Dubois and Gadde (2002; 2014) argue for a non-positivist view of case research. This meaning that they advocate for going deeper into one case instead of researching a higher number of cases, in order to create more value for the researcher in terms of understanding a complex reality. This brings back the purpose of case studies, which is to increase understanding, not to create statistical generalizable data.

With such a new concept as the phenomena in question, it follows that there are limited data resources to choose from. As of June 2018, there are five instances of innovation procurement partnerships in Norway (Difi, 2018b). For the purpose of our thesis, the Stavanger and Oslo projects will be analyzed. These projects are chosen in order to give insight into different phases of the process. For the Stavanger project, the aim has been to gather historical information of their process up until the market dialog. The main aim of the Oslo project has been to collect data from potential participating firms on their expectations going forward. Unfortunately, the timeline of both projects exceeds the timeline of this research project, which limits the possibilities of exploring the evolution of the process. The conclusions from our research will thus be a “function of the time at which the study was conducted” (Dubois & Gadde, 2002, p. 557), in similarity to other research projects looking into processes. All studies have to come to an end at some point, while in reality, processes continue (Dubois & Gadde, 2002).

In the chosen case study approach, the design is seen as a product, it evolves and thus, cannot be planned in advance. The progress of the innovation procurement partnership in Oslo has been slower than first anticipated, and due to time constraints, this research presents less insight into the process than first

anticipated. This led to some adjustments of our research along the way, which is natural when dealing with an evolving process.

4.2 Data Collection

As our research is conducted at an early stage of the development of innovation procurement partnership, we need to be pragmatic in the process of collecting data, thus take in use the data available to us. As few non-complementary sources about innovation procurement partnerships are available at this point in time, our data consists of complementary sources. We have aimed at using complex and varied data to enlighten the phenomenon of innovation procurement partnership. The data collection consists of nine in depth interviews with relevant individuals as our primary data, in addition to analysis of secondary data from multiple sources. Our research project is approved by the Norwegian Center for Research Data, and all collected data has been handled in accordance with their guidelines.

4.2.1 Interviews

Interviews are usually the preferred data collection method of social researchers, as they rely on verbal contributions to learn about social life (Taylor et. al., 2015). Researchers are mainly able to study processes through the people that carry them out or are related to them, as they do not take part in the process themselves (Seidman, 2013). Interviews are known as a method that gathers people's own perspectives on experiences (Taylor et. al., 2015). This led us to use interviews as the primary source when collecting our data. When collecting data, the goal was to gain first-hand information on innovation procurement partnerships within the health care sector, mainly from the view of private organizations. The goal for our data collection was a mixture of two outcomes introduced by Taylor et. al. (2015); "learning about events and activities that cannot be observed directly (...)" and "to yield a picture of a range of settings, situations or people" (p. 103).

Different research settings support different data collection methods. Interviewing seem appropriate when "the research interest is relatively well defined (...), settings and people are not otherwise accessible (...), the researcher have time constraints (...) and the researcher is interested in understanding a broad range of

people or settings” (Taylor et. al., 2015, p. 104-105). These conditions support the choice of using interviews in our data collection process, as writing a thesis naturally creates time constraints in addition to have a defined research interest. In addition, we wanted to obtain a broad understanding of innovation procurement partnerships.

Semi Structured Interviews

When conducting interviews for our thesis, the goal was for the interview to be a conversation instead of a formal exchange of questions and answers (Taylor et. al., 2015). In order to do this, semi-structured interviews were the chosen format. In advance of the interviews we prepared an interview guide, that was adjusted to each interviewee (Appendix 1). When creating the interview guide, we used the elements presented by McNamara (2009); “(1) wording should be open-ended (respondents should be able to choose their own terms when answering questions); (2) questions should be as neutral as possible (avoid wording that might influence answers, e.g., evocative, judgmental wording); (3) questions should be asked one at a time; (4) questions should be worded clearly (this includes knowing any terms particular to the program or the respondents' culture); and (5) be careful asking "why" questions.” (p. 1). In order to get the interviewees to talk freely, the interview guide was made as a guideline for the interviews and their direction, not with the purpose of being strictly followed and digressions were encouraged.

In order for the interview to become a conversation, we used the principles of McNamara (2009) to prepare the interviewee beforehand; “(1) choose a setting with little distraction; (2) explain the purpose of the interview; (3) address terms of confidentiality; (4) explain the format of the interview; (5) indicate how long the interview usually takes; (6) tell them how to get in touch with you later if they want to; (7) ask them if they have any questions before you both get started with the interview” (p. 1).

To create a relaxing and natural setting for a conversation we prepared the setting in advance. For interviewees in the Oslo-area, we would come to their site for the

interview, while the remaining interviews would be conducted over skype/phone. To ensure accurate data collection, we recorded the interviews. iPhones were used to record the interviews, as the quality of the recordings were sufficient and a phone on the table is more natural in a conversation than a recorder. The recording also gave us the freedom to remain from note taking along the way. Computers were deliberately not used during all the interviews, meaning our pre-prepared interview guides were printed out beforehand. These considerations were made in order to create a natural setting for a conversation. All interviews were conducted in Norwegian as all the interviewees were fluent in the language.

4.2.2 Secondary Data

Secondary data was collected during the initial research. We had an exploratory design on our review of relevant research and previously issued reports to ensure we got a fundamentally good understanding of the background and context of innovation procurement partnerships. Internet and libraries were used to access articles, books, public announcements, and relevant reports among other documentation. Even though these sources of information was mainly used for the initial research, they were used along the way to secure clarification and relevant data to support our thesis along the way.

We used secondary data to understand the underlying political objectives and legal framework of the phenomenon of innovation procurement partnerships. Looking into the laws and regulations regarding innovation procurement partnerships, official documents and laws, provided by the Norwegian Government were used, to ensure the correctness of our arguments. Our research also encompassed looking into secondary data from the EU such as white and green papers leading up to the new directive, to get insight into the background of the directive and its objectives.

By looking into old frameworks of procurement, we have been able to create an understanding of the novelty of the framework regarding innovation procurement partnership. To obtain an understanding of the intended implementation of innovation procurement partnerships in Norway we looked into different

presentations on innovation procurement partnerships by Difi. When collecting secondary data on the innovation procurement partnerships projects, public documentation was mainly used, such as applications and announcements. In addition, internal documents from Centre for Connected Care (5.3.1) was used on the Oslo project.

In order to understand the context of the Norwegian health care sector, different statistics regarding the Norwegian population was used. In addition, various documents from the Norwegian government was used to create an understanding of the political initiatives.

4.3 Sample

For the research in this study, a generic purposive sampling technique was used to select projects (Bryman & Bell, 2015), while the snowball effect introduced by Bryman and Bell (2015) is suitable for the identification and selection of our interviewees. Our aim was to get access to individuals who have knowledge and experience with the phenomena in question.

4.3.1 The Projects

When looking into the phenomena of innovation procurement partnership, there is limited access to projects. At the starting point of our research in December 2017, it was two existing innovation procurement partnerships in Norway. In line with generic purposive sampling technique, critical case sampling presented by Bryman and Bell (2015) was therefore used, indicating that both projects were sampled as they have a logical inference with the phenomenon of interest.

4.3.2 The Interviewee

Qualitative interviewing demands a flexible research design, where the sample of interviewees are often changed along the way (Taylor et. al., 2015). During our initial work with this thesis, some thoughts regarding interviewees were created. In the process of conducting research, we wanted to gather information from some of the stakeholders of the projects. Our object was to mainly talk to private

Interviewee	Background
1	Private sector experience. Currently work for a large IT-company in Norway. The interviewee withholds 30 years of experience within the field of technology, mainly focusing on health care technology.
2	Publicly employed. Holds many years of procurement experience, both from the private and public sector. After working in the private sector for most of the career, the interviewee now works within public sector. First-hand experience with innovation procurement partnership.
3	Entrepreneur. Work in a start-up within health care technology. The interviewee's experience contain both medical and technical knowledge.
4	Entrepreneur. Medical background as a doctor, specialized in community medicine, with experience as a family doctor, municipality director of medicine, and responsible for medicine at a large hospital in Norway. Currently, the person works full-time in a health care technology start-up. First-hand experience with innovation procurement partnership.
5	Entrepreneur. Work for a technology start-up that has shifted into the field of health care technology. They possess first-hand information on being a part of an innovation procurement partnership. First-hand experience with innovation procurement partnership.
6	Private experience. More than 15 years of experience as a manager, in addition to lots of experience with entrepreneurship. Currently, the person facilitate several processes in technology development within the health care sector. First-hand experience with innovation procurement partnership.
7	Private and public experience. Currently helps start-ups getting their solutions tested before commercializing. Long experience from both private and public sector.
8	Private experience. Has worked for one of the largest technology companies in Norway for approximately 35 years. Most of the career has been focused on technology to the health care industry.
9	Public experience. Approximately 18 years of experience within the public sector. Withholds first hand information regarding innovation procurement partnership management. First-hand experience with innovation procurement partnership.

Figure 4.3

organizations with some sort of relation to innovation procurement partnerships. We started out by interviewing one facilitator that referred us to another facilitator and some companies of interest. After interviewing these, they again referred us further to other persons of interest. Our interviewees are presented in figure 4.3.

In total nine interviews was conducted in the process of gathering data (figure 4.3). Five of the interviews was with private organizations, with a link to at least one of the innovation procurement partnerships. The remaining four interviews was with facilitators or administrators in supporting roles, two from the private sector and two from the public sector. Several of the interviewees have mixed background, both from the private and public sector.

Of the private organizations three of the companies are small, start-up companies where we talked to either one of the founders or the CEO. The two large private organizations we talked to are leading companies in technology development in Norway. In these companies, we talked to the relevant head of department related to the companies health care initiative.

Comments to Interview and Sample

When we started to scope our interviewees, we aimed for a wide scope, in order to collect data from actors with different perspectives. This gives us insight into different views, but the interviewee might not be representative of a group. Four individuals with different backgrounds read through the interview guide in order to ensure the quality of the questions. The interviewees were not given the questions in advance of the interview, only a short pitch of the research area in order to get them to accept the interviews. This was done to limit the bias of the interviewees to form their opinion and answers beforehand, as the goal was to gather their intuitive reactions to the questions.

In the process of conducting our research, several stakeholders were not interviewed due to time limitations and narrowing the scope of the thesis. As the main focus of this thesis regards private organizations, we did not talk to the main public stakeholders for the projects, such as Sunnaas Hospital and Oslo

municipality. We did not succeed in getting an interview with the tender winners of the Stavanger project. In order to minimize the weakness of lacking this viewpoint, we talked to individuals with professional relations to the winners.

During the interviews, we experienced that some interviewees were reluctant to talk freely, as they did not want to damage their chances for a future procurement partnership or relations with others. As the concept of innovation procurement partnership is fairly new in Norway, companies believe data can be traced back to them, regardless of the anonymization of sources. This as there is a limited number of companies with experience from the process.

4.4 Coding

After collecting data in a research process, it is important to make sense of the information (Turner, 2010). In order to make use of the data collected, different techniques of coding were used through four rounds of coding as an iterative process to identify our findings.

Before coding, all the interviews were transcribed in order to make them easier to work with. In total, we ended up with approximately 130 pages of transcribed data from the interviews. Thereafter the information was divided into groups of information, commonly known as “coding”. These codes are usually “consistent phrases, expressions, or ideas that were common among research participants” (Turner, 2010, p. 759). Our codes were created based on single quotes and inconsistencies, as qualitative research also looks for differences between the data. This information was a result of our interview guide, which was created based on secondary data and theoretical foundation. We chose to use Microsoft Excel to execute the coding of the data, as this is a familiar program and sufficient for our needs. In total, we coded the data in four rounds and ended up with sorting our data on 3 levels (figure 4.4).

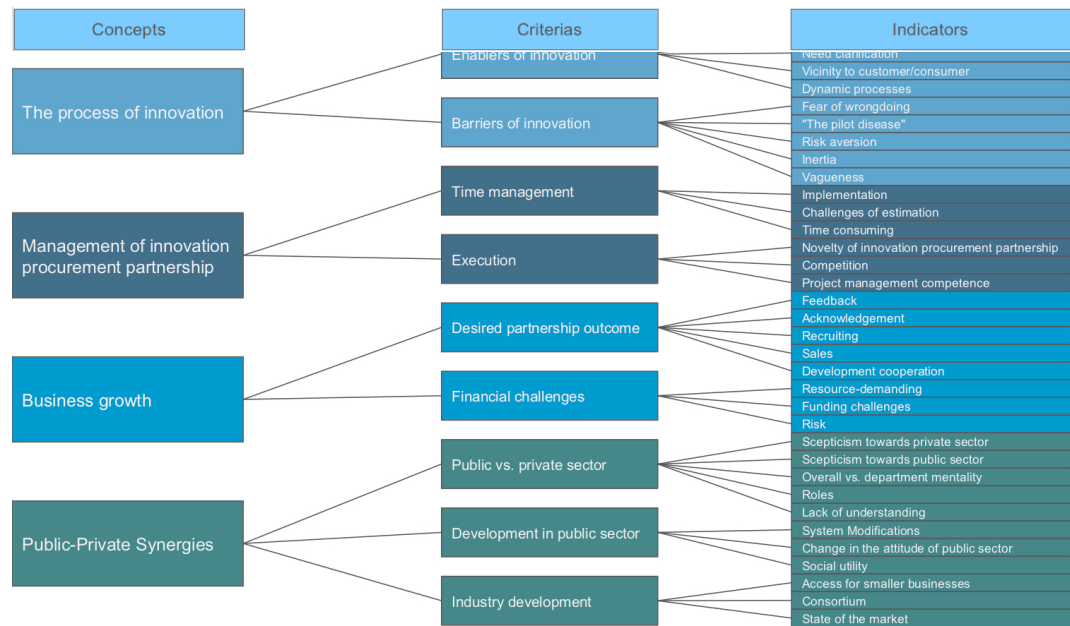


Figure 4.4 (Larger image in appendix 6)

The initial round of coding was based mainly on the reviewed theory and our interview guide while adding codes from empirical findings along the way. In the first round, we used two levels of codes. We had seven general codes with a total of 39 sub-codes that covered both generic background information on our interviewees, the themes from our interview guide, as well as theoretical topics such as institutional aspects. We used a matrix where we crossed the initial codes with the interviewees and used extracts from the transcribed data.

In the second round of coding, we coded the extracted information we had sorted in the first round into terms used by the interviewees. In this round, we started to see some tendencies and began sorting our data on three levels. The relevant statements and information we had identified from the interviewees were grouped together on the lowest level. Thereafter, we gathered these groups that addressed the same topic and created the second level. The second level was further sorted into superior level groups, based on their relevance to each other. While the lowest level is based on the empirical data from the interviews, the second and third level are mainly based on our theoretical foundation from our secondary data. This leads us to sort our findings on three different levels (illustrated in figure 4.4).

We labeled our three levels of data as indicators (lowest level), criteria (second level) and concepts (third level). The indicators are empirically rooted and are named indicators as they give some indication to an element of interest for our interviewees. The second level was labeled criteria because they consist of criteria that are influential on the perceived attractiveness of an innovation procurement. Criteria were empirically rooted but inspired more of the theoretical foundation presented in chapter two and three. Our third level was labeled as concepts, as we found these to be the overall views we wanted to look deeper into. We started with several overall concepts, but after multiple rounds of coding we ended up with four.

Next, to explore the indicators, criteria, and concepts emerging, we used a top-down approach to our data. The extracts from the transcriptions were coded into the concepts, before further into the criteria, and lastly the indicators. While doing this, the concepts, criteria, and indicators were revised and adjusted. Our aim with this was to ensure the quality of the indicators, criteria, and concepts. We did this to make sure to cover all relevant data, both consistencies, and inconsistencies. In this round, we analyzed the data further and created indicators based on observations, such as the indicator “skepticism towards public sector”. This was never stated explicitly, but consistently evident in the way several interviewees addressed public actors individually or the public administration as a whole.

To illustrate our coding we can look into one quote from interviewee 7. The quote *“A downside for all the firms that spend time, resources and money in the first phase and loses. I know that some of the firms have spent around NOK 2-300.000. That is not money they will get back, so for small start-ups it almost means the death of the company.”* was first labeled as resource demanding, as this is the essence of the quote. Later on, it was grouped with other related indicators, and placed under the criteria of “financial challenges”. Looking further and relating the quote with our theory, we placed it under the concept of “business growth”. In the last round of coding, we used a bottom-up approach again to ensure that no

essential indicator had been missed. Following this, we adjusted our concepts, criteria, and indicators one last time.

All rounds of coding were planned together before we worked independently on the main part. To ensure the quality of our coding, we summed up the rounds of coding together, before starting the next round. The purpose of this was to increase the quality of the coding. By coding the data separately, but still ending up with the same extracts in the same themes, coherence was secured.

4.4.1 Language

As the interviews were conducted in Norwegian, the transcriptions were done in Norwegian in order to minimize the loss of data in a massive translation approach. The remaining part of the coding was conducted in Norwegian for the same reason, before translating the themes, categories, and concepts into English. Further, when writing this paper, we translated the relevant extracts and quotes into English. All translations were reviewed and approved by both researchers to ensure that no meaning was lost or altered in translation.

4.5 Quality in Qualitative Research

In line with the non-positivist view of qualitative research, we have chosen to follow, one could argue that the terms of validity and reliability would not be suitable to address the quality of our study. There does not exist an agreement amongst qualitative research of how to best address and assess the quality of a case study (Silverman, 2013; Dubois & Gadde, 2014; Bryman & Bell, 2015). However, it is still determinant that we can ensure the quality of our research and findings. In a direction of a less positivist view, Lincoln and Guba propose two primary criteria as an alternative for assessing qualitative studies: trustworthiness and authenticity (Lincoln & Guba, 1985; Guba & Lincoln, 1994, referenced in Bryman & Bell, 2015), which we have aimed to follow.

4.5.1 Trustworthiness

Trustworthiness refers to the criteria of *credibility*, *transferability*, *dependability*, and *confirmability*. Inherent in these terms are parallels to the criterion in quantitative research. *Credibility*, which parallels with internal validity, ensures that the research is carried out according to good practice and validation of our observations. The latter is done through triangulation, a technique of using multiple interviews and multiple sources of data to ensure credibility (Bryman & Bell, 2015).

Secondly, *transferability*, which parallels with external validity, involves providing enough rich data for readers and other researchers to make judgments about the possible transferability of our findings to other environments or contexts (Bryman & Bell, 2015). We have addressed this by thoroughly describing our methods, data, and findings, in addition to presenting the context of our observations. Transferability does not necessarily refer to the entire research (Polit & Beck, 2010), but can refer to different aspects of a qualitative study, such as analytical or conceptual aspects. We believe the transferability in our study mainly concern the conceptual aspect, providing insights into the concept of innovation procurement partnership, in the context of the Norwegian health care sector. Transferability of the conceptual insight regarding innovation procurement partnership is desired. As researchers, we believe the institution based view is necessary to include in order to understand the phenomena of innovation procurement partnership, which is the main reason for our choice of the theoretical framework. Since this is a qualitative study, it is necessary to expand the understanding into the depth of the phenomenon in the future, which can be done by applying other theoretical frameworks to the phenomena.

Dependability, which has parallels to reliability, refers to ensuring proper documentation of all phases in our research process so that they can be accessed if necessary (Bryman & Bell, 2015). Our research is conducted on behalf of The Center for Connected Care (C3) and one of the terms include that our data and findings are to be available for further use. We have therefore anonymized the

transcribed data in line with privacy regulations and made them available for C3. In addition, we have thoroughly documented our work, both in our thesis and with additional documentation.

The last criterion for trustworthiness is *confirmability*, which parallels with objectivity (Bryman & Bell, 2015). Complete objectivity is not possible for any researcher, but we have taken measures with the aim of reducing our own bias and hinder that personal values or preferences affect the research and our findings. In addition to our efforts to be as objective as possible, we have aimed to be two researchers presents during interviews. This was possible in all but one interview. One of us had the leading role as interviewer and the other held an observational role when conducting the interviews. We switched these roles every other interview. All interviews were recorded and transcribed as they were, without correction, where pauses and hesitations were included. The coding was done by each researcher both separately and together.

4.5.2 Authenticity

In regards to authenticity, Lincoln and Guba suggest some criteria which “raise a wider set of issues concerning the wider political impact of research” (Lincoln & Guba, 1985; Guba & Lincoln, 1994, referenced in Bryman & Bell, 2015, p. 403). Some of these criteria address providing members of the social context with the impetus to action and to improve their own situation. This will be both too preliminary and possibly too ambitious for us to address with our study at this point.

However, one of the criteria proposed is *fairness*, meaning if the viewpoints presented in the research cover different views represented in the social context where the research is conducted (Bryman & Bell, 2015). We have deliberately not included the views of all stakeholders in an innovation procurement partnership, as that scope would exceed our resources for this thesis. However, we have aimed to include a diverse sample and have managed to get interviewees with different backgrounds and views on innovation procurement partnerships, innovation, and

public procurement. Our data collection from secondary sources has been collected from a variety of sources and formats.

Another proposed criteria for authenticity is *ontological authenticity*, referring to if the research is increasing the understanding of the social context for the individuals who are a member of that context. During our research, we have received feedback from different stakeholders in innovation procurement partnerships who have expressed the need for elaboration on the phenomenon. Our interviewees pointed out that we asked the right questions, giving them an understanding that we covered the important aspect of the situation surrounding innovation procurement partnerships today. When asking our interviewees to come forward with additional information/questions at the end of the interviews, the majority felt that the important aspects were covered. This indicates that they agree with our description of the reality.

5.0 Case Description

As stated in chapter four, our research consists of a case study of the phenomenon of innovation procurement partnership. In this chapter, we will present an elaboration on the framework of innovation procurement partnership, as well as the background for its development. Lastly, we describe the two projects we have included in our research: the Stavanger and Oslo projects. An analysis of the different stakeholders in the partnerships is included, to demonstrate its complexity.

5.1 Innovation Procurement Partnership

In this section, we present a discussion regarding public procurement, before entering the concept of partnership. Combining these, innovation procurement partnership will be discussed.

5.1.1 Public Procurement

Public sector encompasses public administration, local municipality administration, and companies owned or controlled by the state or municipalities (Idsø, 2018). Procurement is an activity done with the purpose of covering a need for goods, services, or building and construction (Difi, 2017a). Public procurement is when the public sector procure goods or services (Edquist et. al., 2015).

In order to secure fair processes surrounding procurements, tender competitions with several regulations are decreed by law. The traditional tender competition to win the position as a supplier to the public consists of several steps. First and foremost the procuring organization (part of the public sector that demands a good or a service) need to create a tender by describing in detail what it wants to buy. Following this, every supplier that want to put in a tender offer is free to do so. Then the procuring organization needs to choose the best-fit supplier for the job. If some of the rejected suppliers claims to be a better supplier there are possibilities for appeals on the process. Historically, a majority of procurers in the EU use the

criterion of lowest price as the only selection criteria. After years of talking about the importance of other factors when doing procurement, 55% of procurers still use lowest price as their only criteria (European Commission, 2017). This indicates too little attention given to factors such as quality, sustainability, and innovation.

In a situation where research and development are needed in the process of procurement, this adds another element to the process. Before the tender competition starts, a different procurement process is done for a research and development phase, with a different supplier (Appendix 2). The procuring organization is in some rare cases allowed to pick a supplier for the research and development phase without a tender process, but there is still limited freedom of dialogue during the innovative time period. This often leads to two suppliers, one for the research and development part, and another for the commercialization of the product. This two-phased methodology for procurement of innovative solutions has led to the creation of a well known Norwegian phenomenon: “the pilot disease”. This refers to when firms get resources and acceptance to initiate a pilot project of their solution, but it all ends after the pilot period, due to lack of further funding or procurement. It is important to keep in mind that a procurement process does not allow negotiations and that it is illegal to change the tender during or after the procurement process (Difi, 2017b).

Legal Framework for Public Procurement

The statutory process for public procurement in Norway today is a result of regulations and agreements from several sources. The Norwegian Government is imposed to follow the EU laws and directives through the Norwegian EEA membership. It follows that the Norwegian laws are in accordance with the EU law for public procurement. In addition, Norway has to comply with the WTO Government Procurement Agreement (WTO, 2018a). In general, the regulation promotes fair competition, transparency, and prevent discrimination of international suppliers (WTO, 2018b; European Commission, 2018).

The practical implementation of laws and regulations in Norway has resulted in several ways to conduct a public procurement process in accordance with the law.

The chosen procurement procedure depends on several aspects of the tender. Most defining is the nature and value of the tender. In Norway, there are three main value thresholds which are set by national and EEA laws and regulations (Regjeringen, 2017a). For procurements above NOK 100,000 not including taxes, procuring organizations are required to keep procurement protocol and documentation requirements. If the procurement value is over NOK 1.1 million, excluding taxes, the procurement needs to be publicly announced. With some exceptions, the national threshold is similar to the EEA threshold with 1.1 million excluding taxes, and thus have to accommodate EEA regulations. Further, different regulations apply if the procurement regards health and social services or plan and design procurement (Difi, 2017c).

In order to become a supplier to the public sector, three demands need to be fulfilled, known as the documentation requirements and procurement protocol. The potential supplier needs to deliver a tax certificate and a HES-certificate (health, environment, and security certificate) (Regjeringen, 2017b). The procurement protocol includes a requirement to document essential conditions of the process of delivering the procurement (Regjeringen, 2017b). In addition to these demands, the procurement organization can determine additional skill requirements for the supplier. The purpose of these additional requirements is to ensure that the supplier meets some minimum requirements for technical, organizational, economic, and financial capacity (Regjeringen, 2017b).

5.1.2 Partnership

A partnership can, in general, be defined as “the state or condition of being a partner; participation; association; joint interest” (Dictionary, 2018a). The idea is that the partners in a partnership are stronger together compared to what they are on their own. Inherent in the term “partners” is also some idea of equality and an even power balance. In a business setting, partnerships can be defined as “purposive strategic relationships between independent firms who share compatible goals, strive for mutual benefit, and acknowledge a high level of mutual interdependence” (Mohr & Spekman, 1994). The main goal is usually to gain some competitive advantage through the partnership.

Public-private partnerships are important in order to handle the challenges of the future (Osborne, 2002). What separates the public-private partnership from the private-private partnership is the goal. In addition to some mutual agreement, partners in a public-private partnership seek to somehow improve the urban economy and quality of life (Harding, 1990, referenced in Osborne, 2002).

It can be challenging to determine whether or not a partnership has been successful. As successful means to accomplish goals (Dictionary, 2018b), the challenge occurs as partners often have different goals. The different goals of a partnership can be challenging to measure. Mohr and Spekman (1994) found that “partnership attributes, communication behavior, conflict resolution techniques” characterizes a successful partnership (p. 135).

5.1.3 The Development of Innovation Procurement Partnership

Innovation procurement partnership is a result of a much-awaited policy change after recognizing the need for demand-side innovation in the public sector (European Commission, 2014; OECD, 2011; Edquist et al., 2015). Procurement regulations are criticised for only suiting a limited set of goods and services, and not being representative of all types of public procurement (Uyarra & Flanagan, 2010). Innovative products are one of the products that often fall outside the existing regulations of public procurement. Such new products and services cannot be defined at the beginning of a procurement phase, or be developed, without a dialog between the procuring organization and the market. Literature suggests that public procurement should focus on the quality of governmental services, and make strategic decisions on a case by case basis that foster innovation (Uyarra & Flanagan, 2010). The structures behind the procurement regulations should foster cooperation between different actors of the bureaucracy.

Towards a Shift in the Procurement Policies

Traditional procurement systems have been fostering innovation from the supply side, as the public sector has made detailed tenders for procurement of already

existing solutions, without the ability to negotiate. The degree of specification in traditional tender processes has left little room for creating an understanding among the private sector of the public sector's fundamental needs. The private sector, holding the role of a supplier, are the ones developing new solutions, their lack of knowledge regarding the public sector's needs hinder the development of suitable solutions. Over the last decades, policy debates have focused more on public demand as a driver of innovation (Uyarra & Flanagan, 2010; Uyarra et al., 2014; European Commission, 2014; OECD 2011). Demand-side innovation policies are defined as "all public measures to induce innovations and/or speed up diffusion of innovations through increasing the demand for innovations, defining new functional requirement for products and services or better articulating demand" (Edler & Georghiou, 2007, p. 952). This happens to fulfill the needs of the procuring organization when the goods or service does not exist in the market (Edquist et. al., 2015; Difi, 2017a).

In order to achieve efficiency and meet the demands of futuristic social challenges, innovation and rethinking of solutions are necessary. As public procurement accounts for nearly 20% of the GDP in Europe, there is a clear impact of public spending on the European competitiveness and the economy (European Commission, 2014). The ongoing public debates and pressure from member states have resulted in new EU directives for public procurement. These directives raise demands to environmental and socially sustainable procurements while opening up for implementation of a new framework for innovation procurement. The new directives are a part of the EU's "Europa 2020" strategy (Difi, 2015). Most member countries of the European Union are trying to move towards a holistic innovation policy, which can be defined as "a policy that integrates all public actions that influence or may influence innovation processes" (Edquist et. al., 2015, p. 5).

In February 2014 the European Parliament replaced their directive on Public Procurement, initiating Public Procurement for Innovation (PPI) (Europalov, 2017). This was done in order to make the procurement processes easier and more flexible among other things, in order to support a smart, sustainable and inclusive

growth. A PPI occurs when public procurers ask for something that can fulfill certain functions, and not for a specific object (Edquist et. al., 2015). This in order to satisfy human needs, support agency needs or missions, and to solve societal problems. In addition, some innovation, either through a new process or product, are demanded in order for the process to be classified as a PPI.

Introduction of Innovation Procurement Partnership

The directive from EU was included in the Norwegian procurement regulations by law in June 2016 and utilized January 1st, 2017 (Europalov, 2017). Innovation procurement partnership is a result of these regulations, with a new approach to include innovation in the Norwegian procurement process. In contrast to a PPI process, in an innovation procurement partnership the procuring organization pledge to procure the solution from the supplier, before the product is developed (European Commission, 2017; Norway Health Tech, 2017). In line with recent policy debates, innovation procurement partnership arranges for innovation from the demand side and can be seen as a demand-side innovation policy.

Several steps are present in an innovation procurement partnership, starting off with the procuring organization mapping the needs (Appendix 3). When the needs are mapped, the procuring organization will announce a tender competition in order to find one or several suppliers that can develop the product(s) or service(s) and commercialize it. It is important to keep in mind that in an innovation procurement partnership the procuring organization commits to buy the product or service before it is invented (Norway Health Tech, 2017). This opens up for negotiations and a dialogue between the supplier(s) and the procuring organization when developing the product or service. Another important aspect of innovation procurement partnership is that the winners of the contract will get parts of their development process funded by the public sector (Difi, 2018c). To regulate this, there are set targets defined in the contract, that need to be fulfilled by the private supplier. If these targets are not reached, the public sector has the authority to cancel the contract and give predefined financial support.

The reasoning behind innovation procurement partnership is found in theory as well. As technology is developing and innovations become more advanced, a collaboration between several actors are necessary in order for innovation to occur (Edquist et. al., 2015; Uyarra et. al., 2014; Lu et al., 2008). This as tacit knowledge, a knowledge that is challenging to transfer through verbalizing, is crucial for learning, and only available through intensive interpersonal interactions (Lu et. al., 2008).

5.1.4 The Potential of Innovation Procurement Partnership

Through innovation procurement partnership, there lies a large potential for the public sector, both in terms of efficiency gain and development. As it is established that the public sector can have a notable effect on innovation drive, several researchers have concluded that state demand and state procurement, triggers more innovation in more areas than research and development subsidies (Geroski, 1990; Rothwell, 1984 referenced in Edler & Georghiou, 2007). Through the new policies, the public sector enhances new possibilities for connecting demand and supply. In some sectors, such as health care, the public is often the first user of innovation, thus the lack of demand-side innovation is a strong barrier for suppliers to innovate and fulfill the needs in an efficient matter (Uyarra et al., 2014). If innovation procurement partnership is successfully carried out, the public sector should be better prepared to solve the challenges of the future, as products and services altered for the futuristic needs will be developed.

For private funded companies, innovation procurement partnership can increase the access to the public market for small and medium-sized companies. This as the focus will be on what a firm can deliver, and not if they have the financials to be able to stand by through a challenging, bureaucratic process. An innovation procurement partnership can be seen as more tempting for small and medium-sized firms, without large equity reserves, as the public is committed to buying the product before the cost of innovation is taken. Research shows that if the public purchase innovative products, it also influences the innovation activities of the private sector (Uyarra et al., 2014). As of today, 1.4 percent of public procurement is done with a dialog with the market (Innovative anskaffelser,

2017), indicating a low level of private impact on the procurements. If the access to the public market increase for the small and medium-sized businesses, it can lead to an increased revenue for the firms, which will make the companies grow and in turn create more jobs.

Although small and medium-sized businesses account for the majority of the weight in the economy, they only win 45 percent of the value of public contracts above EU thresholds (European Commission, 2017). Research emphasizes the impaired competitive power of small and medium-sized businesses in relation to public procurement (NOU 1997:21, 1997). One of the reasons for this is the complicated procedures of the traditional procurement processes, with strict regulations and deadlines. According to research, some companies find these challenges too demanding and therefore deselect the public market. The regulations of the procurement processes give losing participants the offer to complain if the results are found to be unfair, but few companies use this opportunity in the fear of exclusion future procurement processes (NOU 1997:21, 1997).

5.2 Stavanger Project

The first innovation procurement partnership in Norway started in the fall of 2016, a few months before the new regulations were operative “Leve HELE LIVET”, directly translated to “Live THE ENTIRE LIFE” is a project located in the Stavanger area that aims to increase life quality for full-time patients under municipality care. This will be done by making them more active and living more independently (Stavanger Region European Office, 2017). The goal of the project is to reduce the number of short-term stays for elderly in institutions (Stavanger kommune, 2017a). Workshops were held during the winter of 2017 in order to identify the needs and challenges to solve the project. The goal of the project is to be finished and start the procurement process by January 2020 (Difi, 2017d).

In February 2018 two companies were announced as contract winners of the Stavanger Project, Innocom and Torpo Industrier (Innovasjon Norge, 2018a). As

of June 2018, the companies have started their development period, which is estimated to be finished by January 2020 (Difi, 2018b).

5.2.1 Background for the Stavanger Project

In the future, Stavanger municipality expects their inhabitants aged 80 to increase from 10,000 to 26,000 (Stavanger kommune, 2017a). Simultaneously with this increase, there is expected to become harder to recruit enough health care workers. As of 2016, 22% of the nursing home beds are short-term beds. The short-term beds are to help individuals become able to live at home, after hospital stays or for persons with lower functional level. Research shows that the inhabitants prefer to live at home and that staying in a nursing home can pacify the elderly (Stavanger kommune, 2017a). As Stavanger municipality wishes for their inhabitants to have an active life and be independent, their aim is to increase the rotation of the short term beds at the nursing homes. They believe that by looking into the reasons why patients need the short term beds, new solutions to help people to live longer at home might occur (Stavanger kommune, 2017a).

5.2.2 Stakeholders in the Stavanger Project

The position of the facilitator and the buyer are held by Stavanger municipality. In addition, it is relevant to look into the private organizations involved and the users.

Stavanger Municipality

In the Stavanger project, Stavanger municipality serves the purposes of both the employer and the facilitator. Stavanger municipality is one of Norway's largest municipalities with its 133,000 inhabitants, located in the south-western part of Norway (SSB, 2018a). In the age group of 67-79 years 5.6% receive home care services, while 1.8% of the age group live in institutions. Their estimated revenue for 2018 is approximately NOK 10 billion. Over a four year period, the municipality plans to invest NOK 15 million in welfare technology (Stavanger kommune, 2017b). They have dedicated a project management team for the innovation procurement partnership, where several employees work full time on managing the procurement.

Private Organizations

After initial rounds of the innovation procurement partnership, two companies have been announced as winners, Innocom and Topro Industries.

Innocom is a small start-up, established in 2017, after the Stavanger project started (Proff, 2018a). Their goal is to develop a robot for the Stavanger project. The goal is to create an activation robot that will motivate and help the users to manage their everyday life (Norwegian Smart Care Cluster, 2018).

Topro Industries is a Norwegian business group with 270 employees. They deliver mechanic and electronic solutions to different industries in addition to technical aids and running a kindergarten (Topro, 2018). Delivering technical aids are their largest area of business, with different rollators as their main product. In regards to the Stavanger project, Torpo Industries will deliver a smart rollator that can track the movements and activity of patients (Waage, 2018). In 2016 Torpo Industries had a revenue of NOK 260 million (Proff, 2018b).

Elderly of Stavanger Municipality

One of the most important stakeholder one might say, are the individuals that are going to use the products in their everyday life. As of 2017, there were 18 000 inhabitants aged above 65 living in Stavanger (SSB, 2018a). The health of elderly in Stavanger is expected to be similar to the rest of the elderly Norwegian population, as described in section 3.1.1. Four key factors are identified when discussing health for elderly people; high cognitive activity, high physical activity, an active social life, and a healthy diet (Folkehelseinstituttet, 2014).

5.3 Oslo Project

One of the ongoing innovation procurement partnerships is found in Oslo (Innovasjon Norge, 2018b). In Norwegian it is named “Et SLAG for fremtidens helsetjeneste”, directly translated “A STROKE for the health care sector of the future” (Stroke in Norwegian has two meanings, stroke as a heart condition and stroke as a battle). In this paper, the project is recognized as, “the Oslo project”.

The aim of the Oslo project is to find innovative solutions for the rehabilitation process of stroke patients. When working towards this, the Oslo project has two formulated goals. The primary goal is to develop a service concept which can save one bed day for each stroke patient per year. Secondly, the project aims to find a solution that shows potential in regards to other chronic challenges with the same complexity (C3 et al., 2017). It is important to keep in mind that the project does not necessarily seek to find one solution, but are open to different solutions for the different procurers.

As of June 2018, the Oslo Project is wrapping up the phase related to need clarification and are one month into the market dialogue phase.

5.3.1 Background for the Oslo Project

Every year about 12,000 persons within the Norwegian society get hit by a stroke. Estimates suggest that this costs the society between NOK 7 and 8 billion (C3 et al., 2017). Due to an aging population, estimates show that the number of inhabitants hit by stroke will increase by almost 50 percent over the next 20 years (C3, 2017). After a stroke, $\frac{1}{3}$ are discharged to go home, $\frac{1}{3}$ receive rehabilitation from the municipality or specialist health care service, and $\frac{1}{3}$ are transferred to nursing. Lack of rehabilitation capacity is a large bottleneck for the treatment of strokes today. The differences between those who receive early rehabilitation by hospitals vary with 17-46 percent on regional levels and there are large differences within the follow-up service of patients (C3 et al., 2017). Due to long waiting periods for specialized treatment (specialist health care services), there is a demand for basic rehabilitation in the municipalities (primary health care services). If the project succeeds and one is able to save one bed day for each stroke patient every year, a conservative estimate shows a saving of NOK 120 million a year.

5.3.1 Stakeholders in the Oslo Project

There are several stakeholders in the Oslo project. The Oslo project is more complex than the Stavanger-project in regards to stakeholders, as the stakeholders are from both the primary and specialist health care sector. In this section, the

focus is on the most relevant stakeholders and they are divided into facilitators, private organizations, public organizations, and users.

Facilitator - Centre for Connected Care

Every innovation procurement partnership needs a facilitator to connect the private and public sectors. In the Oslo project, this role is held by the Centre for Connected Care (C3). As a contribution to solving the future challenges within the health care sector, C3 was started in 2015 (C3, 2016). C3 is a collaboration between 17 partners including hospitals, municipalities, research institutions, and the actors within the health care industry, funded by the Norwegian National Research Council (C3, 2018a). C3's vision is "to catalyze the adoption and diffusion of future health care with patients being in charge of their own health" (C3, 2018b, p. 3). Included in the core activities are development and testing of new solutions in collaboration with the health care sector. The objective of C3 is "To accelerate adoption and diffusion of patient-centric innovations that change patient pathways and delivery systems, empower the users and increases growth in the health care industry" (C3, 2018b, p. 4).

Public Organizations

There are several public organizations involved in this innovation procurement partnership. For the purpose of this section, only the most important stakeholders will be presented. Sunnaas Hospital and Oslo municipality are the public organizations that are involved as buyers in the innovation procurement partnership, while Oslo University Hospital serves as host for the project. In addition, several municipalities follows the projects, in order to potentially procure the solution.

Sunnaas Hospital is the largest rehabilitation and physical medicine hospital in Norway (Sunnaas Sykehus, 2018). Approximately 3000 patients are treated every year and the target group for the hospital is patients with complex loss of function after illness or injuries. Rehabilitation of patients after stroke is one of their specialties. In 2018 Sunnaas Hospital's revenue is budgeted to NOK 590 million,

with a result of NOK 17 million, where NOK 15 million is budgeted to be reinvested (Sunnaa Sykehus, 2017).

Oslo municipality is the largest municipality in Norway, with approximately 673 000 inhabitants (SSB, 2018b). The municipality has a relatively young population. 64/1000 in the age group of 67-79 years receive home care services, while 1.9% of the age group live in institutions. In 2018 Oslo municipality's revenue is budgeted to be NOK 55.7 billion. In the 2018 budget, NOK 22 million is allocated towards attempts of making Oslo a more senior-friendly city (Oslo kommune, 2017). In order for elders to be able to live longer at home, 500 new full-time equivalents are planned over a four year period.

Oslo University Hospital is the largest hospital in Norway, located in Oslo, serving several purposes (Oslo Universitetssykehus, 2018). It is a local hospital for some areas of Oslo, an emergency hospital for larger part of Oslo, and regional hospital for the eastern part of Norway. In addition, the hospital plays an important role in the education of health workers in Norway and is a large contributor to the Norwegian research within health. As of 2018 the hospital employees approximately 20,000 people and have a budgeted revenue of NOK 22 billion (Oslo Universitetssykehus, 2018).

Private Organizations

As of June 2018, the market dialog for the Oslo-project are in the beginning phase and therefore no private organizations are a part of the project. However, several of the firms we have talked to are interested in the project and follows it closely to see whether it fits with their business our not.

Stroke Patients

The group of patients involved is an important stakeholder to keep in mind. Every year, 12 000 Norwegians are hit by a stroke (NHI, 2018). Out of these, $\frac{2}{3}$ experience a stroke for the first time. Estimates show that every 6th Norwegian will be hit by a stroke sometime during their life. As of today, there are approximately 60 000 Norwegian persons that have had at least one stroke

incident. $\frac{2}{3}$ of these individuals have some kind of dysfunction as a result of their stroke. Stroke patients are the patient group that demands most nursing time in the somatic part of the health care sector (NHI, 2018). The treatment needed depends on the stroke (Norsk forskningsråd, 2018), but overall there is a lack of rehabilitation opportunities in the municipalities across Norway (Nøra, 2014).

6.0 Empirical Findings

Our research aims at exploring how innovation procurement partnerships can foster innovation in the interface between the public and private sector, focusing on the private sector's perspective. After analyzing and coding our data in multiple phases, several interesting findings in regards to our research question were identified. Our execution of the coding and the process of our analysis is described in section 4.4. As a result of this process, our data are sorted based on four superior concepts (figure 4.4) that are found to be the most important regarding innovation procurement partnerships for private organizations; the process of innovation, management of innovation procurement partnership, business growth, and public-private synergies. Our concepts and their underlying criteria make up the structure for this chapter. The structure of our findings reflect the abduction approach advocated by Dubois and Gadde (2002, 2014), and is a result of a theoretical understanding and an open coding based on empirical data.

6.1 The Process of Innovation

Innovation is the core value creation in an innovation procurement partnership. During the interviews, we aimed to ask open questions about drivers regarding the company's goals in addition to previous experience with innovation in a public-private cooperation. The topic of indicators in form of regulations, attitudes, and actions that contributed to, enabled, or hindered innovation for the companies was also recurring throughout all of the interviews, both in a general context and in relation to innovation procurement partnerships. In our coding, we sorted these indicators as enablers or barriers to innovation.

6.1.1 Enablers of Innovation

Talking to our interviewees, several enablers of innovation were discussed in relation to an innovation procurement partnership. All of our interviewees, both private and public had a goal related to contributing to value creation for society, as several of them point out that today's health care system is not sustainable going forward.

“To help to transform the health care system”

- Interviewee 8, private experience

This points towards a motivation and will to innovate and create more efficient solutions for the future.

One of the recurring positive attitudes was the acknowledgment and excitement about increasing access to the customer, user, and getting feedback on their products and services. Talking to our interviewees regarding the advantages in the framework of innovation procurement partnership, several advantages occurred.

“The advantage is that it shows the way to us finding new solutions to new issues or new solutions for old issues that can be resolved in a new way....Can people measure and keep track of their own blood pressure instead of someone else doing it? So as a framework, it focuses on that need. It is the biggest advantage and that it is an incentive for more for new development, so that stimulates innovation”

- Interviewee 1, private experience

In addition to this, there was a recurring statement (interviewee 1, 3, 4, 5, 8) about creating user friendly products and solutions that improved efficiency in the health care sector, emphasizing that there is a need for user-driven innovations. This was pointed out by the private actors.

“We see health with three keywords; One is that it must be, it must produce results so that it must be driven ... what we do in health must be driven by showing concrete effects. It must have effects for patients and relatives, and healthy people too, but also effects for treating health professionals ... So it's computer driven, it must be power-driven, but most of all, we think it should be user-driven.”

- Interviewee 1, private experience

Some indicated that there has been too much focus on the health care professionals. Underscoring that what they wanted was a more patient-focused public health care service.

“Sort of address them and ask “What are you missing? What is it you, Jane Doe, is missing?” and then try to develop it, but there is perhaps somewhat more focus on the health care professionals in Norway”

- Interviewee 5, entrepreneur

This indicates that the private actors aims for solutions which are optimal for the patients, in preference to the health care professionals.

In relation with closer access to the need of the customer and user of public health care services, the possibilities of testing came up in some interviews (2, 3, 4, 6, 7). Interviewees mentioned testing their products as an expectation or as a benefit when entering an innovation procurement partnership. They expressed an interest in testing their products in real life settings.

“So the expectation is that we will have the opportunity to develop more of it (technical functions and development of our software) and to integrate other types of services such as blood sampling at home, and such things were we see a need and which requires collaboration with other partners, also I expect that we can get it tested in a way it”

- Interviewee 4, medical background, entrepreneur

It was acknowledged by interviewee 2 that innovation procurement partnership can increase testing opportunities towards the market, as the possibilities for this in other contexts might be limited.

“For business, I want to say that it gives them a unique opportunity to enter the market. Because they do not want to enter the market when they do not get to test. They do not come across the closed wall, right. It's something that all these small tech companies are struggling to just get in, tried it, tested it out. Then they will actually finish their products without actually having it in hospital”

- Interviewee 2, private experience, publicly employed

Four (interviewee 1, 3, 4, 8) of the firms we talked to offered mainly software development and expressed interest in the integration and scaling possibilities. Previous experience taught them that mapping and exploring integration possibilities is determinant for developing their solutions and saw potential regarding this in the innovation procurement partnership participation.

“Or that the way things are done at Ullevål is different from how it is done at Rikshospitalet. One must ask why is that? (...) Then we found out along the way that ehh, yes, a decision support system without context makes no sense, you must be able to integrate with the current system.”

- Interviewee 3, entrepreneur

A partnership with a specific public actor then provides valuable possibilities to increase the understanding of the differences between the public actors and also to create digital solutions with a better fit to the context.

The importance of the need clarification as a basis for the innovation process was emphasized by the interviewees when discussing innovation procurement partnerships. Five (interviewee 2, 4, 5, 6, 9) of the interviews were conducted with individuals who had first hand experience with the innovation procurement partnership in Stavanger who expressed opinions on the basis of that. The topic also came up during the interview with others (interviewee 1, 7) who had no experience with the need declaration process in an innovation procurement partnership. Satisfaction was expressed in regards to resources devoted to the need declaration process.

“So it has been very good. Not least that they have set off money to do this here then. And resources, and make their own employees available in testing and development. So that's a very good way to work”

- Interviewee 7, private and public experience

Openness and adaptability throughout the innovation process in a partnership was a factor mentioned as an enabler, both from the public and private interviewees (interviewee 4, 5, 9).

“Complete openness and being, call it a bit pragmatic than, ehh, do not be so hung up in any results (along the way), ok, it is the results at the end that actually matter, it's not the short-term results that matter.”

- Interviewee 5, entrepreneur

From the interviewees' experience (interviewee 9), the key to successful development was to be open for change, both to themselves and to the public customer in an innovation process, recognizing that innovation is a dynamic process.

“And when you work in an innovation process, it's the case that you have to be prepared to change things quickly. And be prepared that the progress plan you have made does not become quite as ... eh in the project implementation because innovation is alive and active all the time”

- Interviewee 9, public experience

During our interviews, a perception of more room for openness in the innovation process when using the framework of innovation procurement partnership, in contrast to previous innovation procurement methodology, was present.

6.1.2 Barriers of Innovation

The barriers identifiable in our data consisted of perceived attitudes and patterns of behavior within the public health care sector. It came from the interviewees' previous experiences in addition to being factors they mentioned as challenging or difficult to relate to in an innovation process.

It is important to emphasize that the opinions disclosed are referring to experiences from public-private cooperation within the health care sector in general, not specifically innovation procurement partnerships. There were some positive beliefs that the new regulations and the framework of innovation procurement would address these challenges, but there were concerns that inertia and fear of wrongdoing will characterize public innovation procurement.

Entrepreneurs (interviewee 3, 4) and interviewees from larger companies (1, 8) stated that they perceived the actors in the public health care sector as slow. It came up in the context of the public sector as a customer, recipient of services, and in regards to implementation of new solutions.

"It is one thing that you are a slow customer, but also being a slow recipient of a delivery or slow to implement what you want to achieve, it suffocates a lot of innovation"

- Interviewee 3, entrepreneur

Some interviewees (interviewee 3, 4, 8) believed that the inertia came from the fact that the public sector is characterized by a culture where people have a fear of wrongdoing.

"I think the answer to it is that people on the procurement side of the government, the purchasers, they are very, they are very governed by the norms that say "I have to do right". You can not make mistakes. It's like, that's, you're set to manage someone else's money really, and it's so strict."

There are, if they are the least bit unsure of how this falls into the rules, then they pull out”

- Interviewee 3, entrepreneur

In line with the fear of wrongdoing, the public health care sector was viewed by interviewee 3, 5, 8 as an actor with little willingness to take risks, both in regards to trying new concepts and solutions, and when it comes to investments.

“But what we observe may be that public procurers are very defensive and afraid of mistakes, that perhaps there is a stronger focus on avoiding making mistakes than making good purchases due to procurement rules”

- Interviewee 8, private experience

On the other side, internally in the Stavanger project, being open towards individuals making mistakes was a success factor for the municipality (interviewee 9).

The risk aversion from public sector can be implied through “the pilot disease” described in section 5.1.1 not limited to the health care sector. Both interviewee 4, 5 and 8 referred to this phenomenon when asked about their experiences with the public sector as a customer. They also expressed positive attitudes towards how innovation procurement partnership will address that challenge.

In terms of concrete characteristics in the innovation procurement process that was perceived as a barrier, interviewee 4 stated that they perceived Stavanger Municipality as vague in terms of what they were looking for.

“I think the specific procurement was perceived as a bit unclear. A bit difficult to understand. I think ... there was a lot of questions there which indicated that it was a little difficult to get what the municipality really was looking for.”

- Interviewee 6, private experience, currently within the development of technology solutions
Interviewee 1 called for a clearer message from the Oslo-project in terms of how much innovation room there was in the project.

“How much space is there in the project? Because then I think radically new, and not just incrementally new”

- Interviewee 1, private experience

In an opposite view, several (interviewee 3, 8) expressed concern in regards to future innovation procurement partnerships and the need clarification. This regarded the need clarification being too specific, which would be too leading in terms of innovation.

"The risk is that the need clarification becomes "yes, we need a better vacuum cleaner". When thinking really should be "but, really they want cleaner floors" "

- Interviewee 3, entrepreneur

This indicates that it might be challenging to communicate the desired solution in an understandable way without causing confusion or being too specific.

6.2 Management of Innovation Procurement Partnership

The management of innovation procurement partnerships was evident as an important concept. When exploring the experiences and expectations of our interviewees in relation to innovation procurement partnership, the criteria of time management was evident and were emphasized in different ways. There were several indicators that related to the execution of an innovation procurement partnership project, which suggests that these are important factors for private firms entering an innovation procurement partnership.

6.2.1 Time Management

The process of innovation procurement partnerships are by several interviewees (3, 4, 5, 6, 7) perceived as time-consuming. This refers to the perception of the entire process of an innovation procurement partnership for the private and public sector, in addition to impressions from the market dialogue for companies that did not win a contract in the end. Interviewee 7 points out that in the Stavanger project it took one year from the project started until the winners were elected. The question of alternative ways to go through the process is raised.

“For instance, some of the need clarification could have been done through for example Skype. To see what the suppliers offer today, what they work on, and so on.”

- Interviewee 7, private and public experience

Another aspect concerning the time management is the planning ahead of time. According to the rules, when handing in a tender, the firms need to plan ahead what things are going to cost and the time demanded to develop their solution. Among other consequences, other participants that did not get the contract can complain if the plans are not followed.

“It is challenging to draw out a solution that you have not yet developed. And how much that solution is going to cost. It is like playing darts blindfolded. (...) And that you have to stick to a plan you created a very long time ago, and of course it has been a lot of changes since.”

- Interviewee 5, entrepreneur

In a contrary view, it was also expressed concerns regarding time pressure for innovation. Interviewee 5 believed that the timeframe for development of the Stavanger project, was unrealistic as the innovation process takes time.

Looking at the overall time frame of an innovation procurement partnership, the element of implementation is excluded from the process. Several of our interviewees (1, 7) pointed out that the outlined process did not include any specifications in regards to the implementation of the service or product, a part they experience to be the most challenging part of introducing new products.

“I feel that innovation procurement partnership that ends with procurement might only cover half the process, as the implementation of whatever you buy is where the job actually begins.”

- Interviewee 1, private experience

Interviewee 7 points out that in order to achieve a successful implementation, it is vital that the people supposed to use the solution understands how it helps their everyday life. In addition, it is important that the solution works before the implementation process begins.

6.2.2 Execution

From the interviews, some indicators for the execution of innovation procurement partnerships were evident. The fact that this is a new framework for public innovative procurement was mentioned as a challenge in regards to the execution of the project. Both in terms of Stavanger's experience (interviewee 9) with organizing it internally, but also in terms of the understanding from the private sector regarding how they can relate to the methodology. We observed that there was substantial variation in the information and perceptions of innovation procurement partnership from our interviewees from the private sector, especially around the practical implementation of the framework. It was also acknowledged by interviewee 8, who holds long experience from the private sector, when asked about its perception of innovation procurement:

“It is something new. So it is limited what you can think. But if you compare with earlier, I see the benefit of it. Where you at least have a much smaller risk by developing something and that others run off with the result or the customer in the end.”

In contrast, interviewee 6 claimed that the only thing differentiating the new legal framework from old procurement rules is the focus, in addition to being a merger of previously existing mechanisms into one larger process. We observed a scepticism amongst some of the interviewees (4, 6) regarding if the innovation procurement process actually will unfold in a remarkably different way than other innovative procurements from the public sector.

“It is, by all means, good that they have invited to open processes, but I do not know how big the differences are compared to other innovative procurement gatherings. They look like each other.”

- Interviewee 4, medical background, entrepreneur

Another indicator regarded the project management of innovation procurement partnerships and the competence needed for the execution. This topic evolved as a digression in two interviews (3, 8) when discussing the interviewees' previous experiences. Both stated that they had experienced lack of competence in regards to procurement regulations from public actors. Further, they emphasized that there

was a need for a thorough understanding of the regulations in the management of innovation procurement partnership projects. However, interviewee 3, who is an entrepreneur, advocated for the need of interdisciplinary teams for a holistic and efficient process to occur.

“It should be a team to start with. Not an individual. You must have a skilled project manager who is a well-structured organizer, who has the ability to pull the strings and delegate. (...) One that is a so-called service center; one who has empathy and understands the domain. (...) Also, you need anchoring. You need backing among end users.”

This indicates high expectations to the competence of the project management.

Other interviewees suggested that there was a need for knowledge and understanding of both the regulations and private sector to obtain the best results. In line with this, it was underlined by interviewee 9 that the interdisciplinary competence in the project management team and a devoted pool of resources in form of varied competence was seen as one of the most valuable assets for the Stavanger project. It was emphasized appreciation for the embeddedness and support of the project on all levels in the municipality administration.

In terms of the competitive situation, it was claimed by interviewee 6 and 7 that this was not considered enough in the execution of the marked dialog in the Stavanger project. The market dialog with open meetings and many potential supplier presents were experienced as unpleasant for some, as they wanted to contribute with ideas, but were conflicted when competitors were present in the same room.

“It's a little problematic to sit in a room, it's applicable in all innovative procurements, the municipalities really want to gather all the suppliers because it is efficient and so on for them, in rooms where one should sit jointly, but then you really are competitors too, and it's a bit painful for the suppliers.”

- Interviewee 7, private and public experience

In reference to the same issue, interviewee 6 advocated for having structured one-to-one meetings to address issues in regards to competitive considerations and business secrets.

6.3 Business Growth

In relation to innovation and entrepreneurial activities, business growth is a natural objective. This was not addressed as an explicit topic in our interviews but was a natural recurring topic in varying contexts. Several indicators regarding the criteria of what the actors wanted to achieve through participation were found. Related to business growth when talking to entrepreneurs, in particular, different challenges regarding funding and resource limitations were also natural criteria.

6.3.1 Desired Partnership Outcome

Interviewing private actors (interviewee 1, 3, 4, 5, 8) involved in or aspire to become involved in innovation procurement partnerships there are several things they desire. Increased sale might be the most obvious outcome, as it is the most secure way to survival for firms.

“And the other is of course sales”

- Interviewee 3, entrepreneur

Some of the individuals (interviewee 1, 3, 5) we talked to did not mention income or sales in regards to success factors. Looking beyond sales, several aspects are mentioned when talking about success and objectives. Some (interviewee 4, 8) mention network building as an important factor, and hope to find a partner through the process whom they can create a consortium with to deliver an offer. This is especially the case when a firm is not capable of delivering a complete solution by themselves, but believe they could be an important player alongside someone else. By working together on a project, one company (interviewee 4) mention their belief to grow individually as well, developing towards becoming an independent company. In relation to innovation enablers discussed in 6.1.1, it was a desire to enter collaborative projects for development with a partner holding valuable insights, such as the existing public health care providers. This was both

viewed as an enabler for innovation and an objective for ensuring development towards efficient, quality solutions, and products.

One of our interviewees (interviewee 5) mentioned increased attractiveness in the recruiting process as an important outcome from an innovation procurement partnership. Being a small start-up it can be hard to attract talents. Winning the contract of an innovation procurement partnership often secures the next years for the company in addition to signaling that the market desires their product, thus increase their attractiveness in recruiting situations.

As of now, there does not exist many innovation procurement partnerships in Norway. As Innovation Norway signals that several partnerships are along the way, the public sectors and involved firms in the current partnerships can gain some acknowledge and legitimacy for their work, as it is recognized and followed by private and public sector across Norway.

“Ergo, we gain some cred for being the first ones to do this”

- Interviewee 9, public experience

Lastly, one of our interviewees (interviewee 4) mentioned feedback when talking about innovation procurement processes. They put lots of resources into the initial round of the Stavanger process and delivered an offer they believed was good. In the end, they did not win the contract. However, they did not receive any feedback which made them wonder what they did wrong. Without any feedback it is hard to figure out how to improve themselves as a company towards innovation procurement partnership in the future, not knowing if the idea was totally out of line or if the idea was just wrong for this project.

6.3.2 Financial Challenges

An innovation procurement partnership sounds appealing to both private and public sector with the possibilities of new solutions and growth. One of the downsides seems to be the resources required to go through with such a process for both sectors.

“The largest obstacle is that the process is resource-demanding, both in time and personnel.”

- Interviewee 9, public experience

The private sector needs to consider the financial resources demanded by the process, while the public sector needs to carefully consider the purpose of the procurement. This in order to ensure that an innovation procurement partnership is the most suitable process, compared to a regular procurement process, which often demands fewer resources. In addition to procuring the result in the end, the public sector needs to contribute with time and competence throughout the process.

Looking at the resources demanded from the private sector, it is a resource-demanding process for the firms involved before the winner is selected. However, the concept of innovation procurement partnership appeals to many companies, with the guaranteed income for the winners of the contract.

“A downside for all the firms that spend time, resources and money in the first phase and loses. I know that some of the firms have spent around NOK 2-300.000. That is not money they will get back, so for small start-ups it almost means the death of the company.”

- Interviewee 7, private and public experience

As a result, it is important that firms carefully consider the outcome of the innovation procurement partnerships if they do not win the contract. Individuals (interviewee 1,8) we talked to from the larger firms see a large benefit regarding access to resources, as they do not live on a day-to-day basis the same way start-ups do.

Several of the entrepreneurial firms (interviewee 4, 5, 6) we have talked to emphasize the resources demanded to participate in an innovation procurement partnership as an obstacle. On the other side, they see the large potential if they end up winning the contract, as this will guarantee income going forward. This due to the public sector's obligation to buy, which will give much-needed capital for further growth, which they are struggling with today.

“The financing programs of Innovation Norway are good for start-ups, but poor for growth”

- Interviewee 4, medical background, entrepreneur

The risk of participating can, therefore, be seen as large, due to the resources demanded, but the outcome of guaranteed sales if the firm win still allure firms to wish to participate in innovation procurement partnerships.

“When you win there is almost no risk. Of course, you have to deliver! Beside that, you get financing for the entire development process and the opportunity to sell the product afterward.”

- Interviewee 7, private and public experience

This indicates the dilemma start-ups considering an innovation procurement partnership must evaluate.

6.4 Public-Private Synergies

All participants in our study acknowledge the potential that lies in public-private cooperation. The public sector needs innovation and solutions from the private sector to solve futuristic problems and meet demands. The private sector needs access to the needs, an environment to test solutions, and financial aid to develop and grow. There is a clear interdependency, and development in one will have synergies on the other. In our data, we identified three criteria that can be influential on development with this synergy in mind; development in public sector, industry development, and public vs. private sector.

6.4.1 Development in Public Sector

Despite a common goal between private and public sector, several obstacles for developing solutions for the public sector are pointed out during our interviews. Interviewee 8 points out how the public sector sometimes seems more eager to create new solutions in areas where there already exist good solutions, instead of making use of good solutions that already exist. This questions the allocation of resources within the public sector.

“What has slowed most in Norway is that we have too much money. Politicians don’t want to make unpopular decisions when they don’t have to.”

- Interviewee 8, private experience

Even though the situation portrayed of the Norwegian health care system was not that flattering, one of our interviewee (8) points out that there has been a clear improvement over the last four years, mainly due to the public sector initiating conversations with the private sector in order to find solutions together through collaborations. This is described as a step in the right direction of making the public sector more open for innovations and radical solutions, which the private sector perceive as lacking (interviewee 1, 3). The need to cooperate with the private sector was also recognized by the interviewee from the public sector.

“It is not realistic that the municipalities or the public sector maintain the welfare society alone in the future. We need to think new in order to succeed with a cooperation with the private sector.”

- Interviewee 9, public experience

During the interviews, the construction of the public system was criticised in different contexts. The critique was mainly towards the health care sector, but also towards public administration in general. A recurring critique towards the latter was regarding a too dominant focus on cost alone in the public administration instead of focusing cost versus benefit and utility. A more specific critique towards the public health care sector was that it is very fragmented (interviewee 1). This referred to the division of different institutions on a basis of geography, the degree of specialization, and finances, arguing that it was slowing down the process of innovation and made it difficult for private actors to relate to in innovation processes. Talking about fragmentation, it was pointed out that the funding programs through the public sector in Norway are perceived as fragmented (interviewee 1, 5). This can be challenging for entrepreneurs aiming to grow in the private sector.

A majority of our interviewees (3, 4, 5, 6, 7, 8) believe most of the challenges related to public sector lies on system level and are deeply political rooted. One thing they all (interviewee 3, 4, 5, 6, 7, 8) agree on is the need for change on a political level to develop the public sector, which again can help to develop the private sector.

6.4.2 Industry Development

Industry development is an important focus when talking to our interviewees. The private actors (interviewee 1, 4, 8) see the potential to deliver solutions together with others in an innovation procurement partnership. Firms are also positive to the focus on the involvement of small firms in the processes (interviewee 3, 4, 5, 7), which is important for the industry development.

“We actually give the firms that usually do not hand in a tender the opportunity to join in. By that, I mean that it is often few entrepreneurs or different types of consortiums. There is an increase of small and middle-sized firms who join in, rather than the larger actors we have worked with earlier.”

- Interviewee 9, public experience

In addition to potentially new partners, the financial arrangements in an innovation procurement partnership can be seen as a motivation for the small firms to join in, which can accelerate the industrial development.

“It is not common to come upon opportunities like this, where you get lots of funding without having to give anything back, such as stocks.”

- Interviewee 5, entrepreneur

Some of our interviewees (1, 9) pointed out that there is not just the public sector that needs to change going forward, the private sector needs adjustments as well. Interviewee 1 points out that the private sector needs to become more creative and not just keep the mentality of delivering after a detailed description from the public sector. In addition, the private sector needs to learn what public sector is.

“I believe private sector must know their role, and in addition see that role in relation to what the public’s role is”

- Interviewee 1, private experience

By challenging the public sector, the private sector can increase their knowledge and understanding of public sectors needs. In the long run, this can lead to better solutions for the society as a whole.

To develop companies, funding is an important factor, especially for entrepreneurial firms. According to one of our interviewee (5), investment capital is easier to obtain as soon as somebody has shown public interest in your product. When you get some capital, this can be used as matching capital when applying for funding from others, such as Innovation Norway. Another interviewee (4) points out that several investors seem to have strong opinions regarding a market they do not know much about, which challenges the process of securing capital.

Some of the actors we talked to (interviewee 3, 4, 9) talked about the public sector's market power. They argue that problems arise when the public sector is not aware of this, or if they are aware but do not know how to use it. Traditionally this has favored the larger firms, where the smaller firms are the losers and over time disappear (interviewee 4). Two of the interviewees (1, 3) point out how Norway is a great place to develop a technological health care sector. This is based on factors such as the lifestyle of Norwegians, a stable infrastructure, and high level of technical knowledge among the users.

“The millennials want telemedicine, they want to be able to talk to their doctor on the phone”

- Interviewee 3, entrepreneur

6.4.3 Public vs. Private Sector

One of the central aspects of an innovation procurement partnership is the cooperation between private and public sector. Traditionally, there is a gap in the overall goals of the public and private sector. As public sector exists to create a social order and focus on solving the overall social tasks with the resources given to them, private sector focuses more on positive economic results and growth, in order to survive. This influence the economic focus of the sectors.

“The private sector has more focus on overall profitability, while the public sector has more focus on costs. This related to the separate budgets for all departments, while the private sector has a bottom line in the end, so they are more willing to pay for something that gives a larger value in the end.”

- Interviewee 8, private experience

Interviewee 3 and 8 perceived this gap as reduced over the last years, and explained this by stating that Norway's politics has become more center-oriented. One aspect some of the private actors (interviewee 3, 4, 6) we talked to still believe is present, is a skepticism in the public sector towards the private sector. However, it is evident in how the public was described by private actors that there is a substantial amount of skepticism from private sector towards the public actors within health care as well.

The skepticism and the "us and them" way of thinking were present both in the context of attitudes and in the context of competence and knowledge. Talking to our interviewees (interviewee 1, 3, 4, 9), the ones in public sector had reservations regarding the competence of the private sector, while the ones in private sector had reservations regarding the competence of the public sector.

"They do not see their market power clearly, and their role as an important contributor to the business development"

- Interviewee 4, medical background, entrepreneur

"It is something about understanding."

- Interviewee 9, public experience

In addition, interviewees from the private sector (interviewee 1, 3) questioned the design-thinking abilities of the public sector. Elaborating on this, it was questioned if the public sector is competent enough to understand their needs during the initial phases of the innovation procurement process.

Some of the interviewees (interviewee 1, 3, 4) express their concern regarding the public sector being wide open for new solutions. There were some speculations to whether the public sector had their mind set to certain types of solutions when announcing the innovation procurement partnership, without including it in the announcement as they want to appear open for all solutions. Following this line of thought, some of the tenders will be excluded from the competition without ever really being a part of it. This can be related to the different focus areas of the sectors.

We observed that the interviewees from the private sector mainly focused on their perception of barriers to innovation related to the procurer, instead of their own strategies and choices. This can indicate a lack of understanding regarding the public sector from the private sector. As an example, we observed the use of terminology by interviewees. While the public sector was consequent on their usage of the words such as “user”, “patient”, “health care professionals” and “doctors”, this varied amongst our interviewees from the private sector that were less consequent on this distinction. This use of different terminology might indicate some confusion regarding who the innovation is aimed at, or at least that there are some barriers in terms of communication.

Another interesting observation is the interviewees’ lack of reflections regarding the term “partnership” during our interviews. The terminology inherent in “innovation procurement partnership” does emphasize that the innovation should occur under a partnership mentality, indicating some sort of equality amongst the different partners. When asked about this equality, interviewee 5 perceived the decision making power to lie within the public sector actor alone.

“What matters to them is if they think that the changes we make for example will lead them to want to buy again then (...) they have the decision-making powers.”

- Interviewee 5, entrepreneur

Questions regarding expectations or experience in terms of working together in a partnership as equal partners were either dismissed or not perceived as interesting for any of our interviewees.

7.0 Discussion

The discussion consists of a connection between the presented theory and empirical data. This section aims to discuss our research question *How can innovation procurement partnerships contribute to innovation between public and private sector?* In our findings, we have identified four key concepts which can be considered as the most important for our interviewees as actors in an innovation procurement partnership: the process of innovation, the management of innovation procurement partnerships, business growth, and the synergies between public and private sector. Looking back at our findings in chapter six, we see that the most interesting issues are found in the interplay of our concepts. These interplays are directly linked to our research question. They point at how innovation procurement partnership influence different elements of the innovation process; the development of an idea, risk and uncertainty, and the collaboration between the public and private sector. However, we believe all of these aspects can be discussed through the lens of the institution based view to identify enablers and barriers to the innovation process within the context of innovation procurement partnerships. Before addressing the interplays, we wish to address how the institutional context can be considered to affect innovation procurement partnership and vice versa.

7.1 An Institution Based View of Innovation Procurement Partnerships

For our study, we have used the institution based view as a theoretical foundation and an analytical framework. The assumption that the innovation procurement partnership is affected by institutional factors such as laws, norms, and culture has been used as a fundamental basis. Our objective is not to prove the explanatory power of the theory, as we have presented previous research that established the relation between institutions and organizations. However, we do believe it is interesting to discuss how the framework of the institution based view can contribute to an increased understanding of innovation procurement partnership in the Norwegian health care sector. By analyzing different elements that we have

uncovered regarding innovation procurement partnership in our research, several institutions are suggested based on our theoretical foundation and empirical findings (Appendix 4).

We have previously introduced three institutional systems; regulative, normative and cultural-cognitive (Scott, 2001). Research presented in section 2.2.1 state that which institutional system considered to be the most important, differs depending on the context (Lu et al, 2008). This leads to questioning which is important in the context of innovation procurement partnership. It can be argued that the framework of innovation procurement partnerships would not be possible without the change in legal regulations. However, as one of the interviewees pointed out, the framework does not consist of entirely new mechanisms. The novelty is the compositions of mechanisms into a complete framework with an increased focus on innovation. If we view this together with the challenges evident from our interviews, we would argue that the most important institutional forces steam from the normative institutions and cognitive-cultural systems, which can be known to contribute to creating “the rules of the game” (Peng et. al., 2009). This is especially evident when focusing on barriers and inefficiencies. As many of the indicators seem to exist in the interface between normative and cultural-cognitive institutions, our data does not provide the foundation to suggests which of the two who is more prominent. Within the framework, it is evident that there are clear interdependencies between the systems, as they all restrict and drive behavior.

Terminology is one example from our empirical findings which can be argued for crossing both normative and cultural-cognitive institutional systems. Although language is highly cultural there are some norms established as of how to communicate. As we observed in our findings, there were inconsistencies in the use of terms in regards to different roles within the health care system used by the private sector. Whether it is just an unknown terminology or refers to a more fundamental lack of understanding is not clear, but it might lead to challenges in regards to cooperation if not clarified.

The fundamental argument of the institution based view is that organizational behavior is formed by the norms and expectations imposed by the context and environment it operates within (Powell & DiMaggio, 2012) because the organizations have a need to be acknowledged as a legitimate actor (Suchman, 1995). Some of our interviewees from the private sector stated that they saw the potential gain from entering an innovation procurement partnership in terms of legitimacy from the external environment. They believed the partnership signaled to others that they had potential, which lead to increased possibilities for future funding, sales, and recruitments. In addition, some firms hoped to build a network and find a partner during the process. This is supported by Dacin and her colleagues (2007) proposition that associations with the right partner can contribute to the perception of legitimacy. It was some indicators that political pressure and expectations of innovation within the public sector are present today, leading to increasing the public actors focus towards adopting innovative approaches. This can affect the perceived legitimacy of the public actors who engage in the use of innovation procurement partnership, as suggested by some of our interviewees. In line with this, it was questioned whether the public actors such as municipalities were engaging in innovation mainly to gain legitimacy for innovating, instead of using existing, suitable solutions.

One of the essential questions that need to be considered is: given that these institutional systems have some positive and negative consequences for innovation procurement partnerships, how can one address those with negative consequences? According to Seo and Creed (2002), institutions will change because conflicts and tensions between institutions will reshape consciousness and lead to change in praxis, which in turn will lead to change in the institutionalization of those new praxises. The fact that innovation procurement partnerships were established as a new framework might be seen as such a change of praxis within the regulative institutional system. There has been a change in focus of the political agenda in the latest years, with increasing efforts for innovation within the health care sector. The statements in some of the interviewees regarding improved relationships with public actors might also indicate changing institutional norms and culture.

Due to the dynamic nature of institutions (Seo & Creed, 2002), there exist a paradox in regards to the institution based view and innovation procurement partnerships. The paradox occurs because both institutions and organizations are humanly constructed (Peng. et al., 2008). Further, institutions are created and preserved by humans. The participating organizations in an innovation procurement partnership are therefore affected by the institutions of which they are a part of and contribute to preserving. In light of this view, if participants of innovation procurement partnerships manage to overcome some of the challenges they meet, such as the situation regarding the competitive considerations between businesses in the market dialogue, this can lead to changed praxis, which in turn can contribute to the institutionalisation of new culture, norms, and regulations. As stated by Ruttan and Hayami (1984) institutions can be subjected to innovation. This might indicate that if the actors within the innovation procurement partnership manage to establish cooperative behavior and culture, this might affect the institutional environment surrounding innovation procurement partnerships.

With the institution based view in mind, we want to look further into the interplays of the concepts presented in chapter six. As we found the innovation process as a key concept, it is of high importance to discuss how it can be influenced by the framework of innovation procurement partnerships and how it interacts with the other concepts. First and foremost we want to look into the aspects of developing an idea in the process of innovation. Further, the interaction between the innovation process and the concept of business growth leads us to discuss how innovation procurement partnerships can address elements of risk and uncertainty. This is important given the framework's intent of increasing the possibilities for small and medium sized businesses. Lastly, given the concept of industry synergies and the collaborative nature of the framework, we want to discuss how public and private actors can collaborate within the context of an innovation procurement partnership. These issues have led us to formulate three sub-questions in order to answer our research question and the further discussion will, therefore, be structured based on this.

7.2 How Can an Innovation Procurement Partnership Facilitate the Development of a New Idea?

Innovation can be said to be the most prominent concept that appeals to private organizations in the context of innovation procurement partnership. One interesting question to discuss is therefore how the phenomenon of innovation procurement partnerships can contribute to the development of a new idea to create innovative solutions. In regards to this, several aspects of innovation and the innovation process were emphasized in our empirical findings.

The institution based view suggests that the institutional context affect innovation strategies by rules of legitimacy, the different incentives provided for innovation, and the source of knowledge (Lu et. al., 2008). Innovation procurement partnership can be said to address all of these elements. The legal framework constitutes of regulatory institutions providing new rules for dialog and collaboration between public procurers and the private supplying organization. New incentives for innovation are present, both in substantial development funding from Innovation Norway, access to new knowledge about the customer, and decreased risk and uncertainty by guaranteeing procurement after development (European Commission, 2017; Norway Health Tech, 2017). These incentives are pointed out as important motivators by our interviewees. As mentioned in section 5.1.2, research states that public procurement can contribute more efficiently than government subsidies in regards to driving innovation (Geroski, 1990; Rothwell, 1984 referenced in Edler & Georghiou, 2007). Regarding the source of knowledge, the possibilities for dialog and cooperation are central in our interviews. This as they provide a significantly improved access to the market and the demand for the private suppliers in the health care sector, which can be seen as providing new sources for knowledge (Lu et. al., 2008).

The increased access and focus regarding the customers and users possible through the framework of innovation procurement partnership can be seen as providing a foundation for a move towards user-driven innovation (Rosted, 2005).

As stated in our findings, we found that there were a general interest and emphasis on developing solutions, with a design based on the users need. This is in line with theoretical statements on user-driven innovation (Understanding user-driven innovation, 2006). The aim is to create something that provided value for the patients, users, and/or health care professionals. The drive to test products in realistic settings is in line with the theoretical statement that solutions are more valuable if developed in cooperation with the user (Leknes, 2016).

Despite positive attitudes towards the concept of user-driven innovation, it is evident both from theory and our empirical data that several challenges arise in regards to this. Previous research has pointed out that it is challenging to continuously involve the user in the development process (De Moor et. al., 2010), as they might limit the possibilities of innovative solutions due to their personal perception of the need. In addition, it is suggested that involving patients might not have a positive effect on them in terms of stress and uncertainty (Gulbrandsen et. al., 2016). This questions the Norwegian government's attempt to institutionalize the involvement of patients through policies. De Moor and colleagues (2010) pointed out that there exist challenges in regards to integrating the knowledge from the user in the development process, which is increasingly interdisciplinarity. However, the knowledge the patients hold is valuable, as it is learned from experience, known as tacit knowledge (Lu et. al., 2008). The sharing of tacit knowledge advocate for a closer relationship between user and supplier as it can only be transferred through interpersonal interactions (Lu et. al., 2008).

With today's sophisticated technology and a high level of specialization, we need several actors for innovation to occur (Edquist et. al., 2015; Uyarra et. al., 2014; Lu et al., 2008). This is in line with the framework of innovation procurement partnerships possibilities for facilitation of collaboration between actors. A closer relationship between the supplier, the user, and the markets are also in line with Hoholm's (2009) statement that the market can be considered as an internal factor in the innovation process. As the suppliers and entrepreneurs access to the market and its demand traditionally have been restricted by procurement regulations, it is not surprising that the public health care sector is considered to be a slow adopter

of new technology. By connecting the demand and supply sides through the framework of innovation procurement partnerships, the consumers can contribute with feedback and modifications in a more direct way to the supply side (Hoholm, 2009).

Based on our data, another challenge in regards to the user-driven innovation focus in an innovation procurement partnership is evident. There exist conflicting views on how to best explore, identify, and articulate the need which the innovation is intended to solve. Our interviewees questioned if the public actor possessed the right competence to correctly identify the need. In the need declaration phase, it is important to use knowledge, while research suggests that this might be overshadowed by institutions (Osborne & Brown, 2013). It was questioned if the public sector were able to think in an innovative way, as it might be difficult to know what they desire if it does not exist yet. For instance, one can reflect on Henry Ford's quote "If I had asked people what they wanted, they would have said faster horses." (Vlaskovits, 2011).

In terms of articulation of the need, opinions expressed in our collected data ranged from making it very specific to very open-ended. The preference for a high degree of specificity regarding official procurement announcement might stem from the fact that this has been the institutionalized laws and norms (Scott, 2001). Another question raised by our interviewees was whether the need should be articulated at all, or just be an articulation of a goal in order to get enough room for innovative solutions. To look into the question regarding openness, it has to be discussed in the light of which degree of innovative solutions the public sector wanted and needed. The degree of innovation wanted by public sector was information several of our interviewees stated that was lacking from both projects included in this study. According to theory, an analysis of different forecasts for the future can contribute to give insight into the demand and innovative room (Wold & Jureen, 1953).

If radical innovations are needed, suppliers are required to think outside the box (Ettlie et. al., 1984). This might be viewed as advocating for a less specific

description of the need that is to be fulfilled, in order to leave room for a high degree of innovation. Ettlie and colleagues (1984) point out how larger organizations are more likely to successfully implement radical innovations. In this manner, the procuring sector can be compared to a large organization, with the ability to implement radical innovations to use. Although not specified in official documents, in terms of degree of innovation, it is indicated that the two projects of innovation procurement partnerships studied aims for a more radical form of innovation. In light of the amount of resources needed to organize and execute an innovation procurement partnership, it might also not be efficient to use the framework for incremental innovation. However, if a radical innovation is desired, one should consider the involvement of users in the process. Hoholm (2009) suggest that user driven innovation is not preferred in a situation where radical innovation is desired due to the users' lack of knowledge. Overall, the radical innovations are usually research driven (Hoholm, 2009). A better solution can, therefore, be to involve the users during the need clarification process, rather than during the idea generation or development process.

In terms of the innovation process itself, it is at a very early stage in the ongoing innovation procurement partnerships, and it is not possible to draw any conclusions regarding the final value creation. If we are to make some preliminary observations we can relate it to the view of the innovation process as contingent (Garud et al, 2013). There are indicators that the innovation procurement partnership framework can be used to take this contingency into account, in contrast to previously rigid procurement regulations. The interviewee with first hand experience of innovation procurement partnership management emphasized the mentality of openness and room for mistakes as key drivers for the Stavanger-project. In regards to the development of a new idea, it will be interesting to see how the innovation occurs, especially within the set timeframes. It is also implied that the value creation depend on the actors ability to change and adapt their current informal institutions. This as their strategic decisions are formed by institutions (Powell & DiMaggio, 2012).

The drivers of the innovation process have been defined in terms of phases of convergence and divergence (2.1.2). While the divergence refers to drivers in form of resource expenditures, convergence refers to external factors that provide constraints (Garud et. al, 2013). Looking at drivers for divergence in regards to the framework of innovation procurement partnership, the financial incentives are the most relevant. Participation in an innovation procurement partnership will affect the resources available for the company, and contribute with limitation in resources such as time. However, the effect of winning an innovation procurement partnership can include increased revenue and new employees, which can increase the companies resources. The drivers for convergence can refer to the overall need for development within the Norwegian health care sector to meet the future demands and the mentality of the firms striving to find solutions for this. The institutional context is also included in the definition of convergence (Garud et. al, 2013). According to the institution based view, this includes the suggested cultural and normative institutional systems, as well as the regulative institutions which include the innovation procurement partnership framework (Lu et.al., 2010; Tang, 2010; Scott, 2001). Thus the framework of innovation procurement partnership and the institutions suggested in 7.1 can be seen as exogenous constraints and drivers for convergence in the innovation process.

When it comes to implementation of the innovation, it can be seen as an widespread acceptance of the new idea, thus an institutionalization of the innovation (Swanson & Ramiller, 1997; Van de Ven, 1986). We would argue that there are some indicators of lacking emphasis on the implementation of the available data we have collected on the Stavanger and Oslo project. As pointed out at the beginning of our thesis, there is established recognition that implementation is per definition one of the criteria for innovation to take place (Garud et.al., 2013; Regjeringen, 2018). However, to our knowledge, this is not reflected in the project's documents so far. Based on the phases presented in the Stavanger-project, the project seems to stop after procurement of the innovation. This was also pointed out by some of the interviewees. Based on previous tendencies of the public health sector, for instance, “the pilot disease”, implementation, and diffusion can be seen as a barrier, and thus should be

emphasized in an innovation procurement partnership. This has been rooted back to normative and cultural cognitive institutions in the health care sector, such as the fragmented structure and fear of wrongdoing. The implementation and possibilities for commercialization of the invention are critical for the private organization providing the solution, as well as for the innovation procurement project. As the Stavanger-project at the time of our thesis writing is in the development phase of the innovation, it is still too early to say anything regarding the execution of the implementation, other than a lacking focus in the overall framework.

The collaboration in the framework of innovation procurement partnerships can be seen as the innovation process occurring on different levels (Garud et. al, 2013). Referring to the execution of the Stavanger-project so far, this is especially evident in the market dialog phase (Appendix 4). In section 2.1.2, we presented a theory which states that innovation occurs within both firms, multi-party networks, and within communities. During the market dialog in the Stavanger-project, each firm was working on the development of their own solution, but it was also facilitated for group seminars with the intention of brainstorming ideas collectively. The forming of consortiums between actors were encouraged. This refers to how multi-party networks interact to invent and develop innovations (Garud et.al., 2013). The communities consist of the private organizations, representatives from the user group, and Stavanger municipality, as the public actor. Including different stakeholders with diverse interests in the brainstorming process can contribute to creating the infrastructure for the innovative solutions desired (Garud et.al., 2013).

As stated at the beginning of this section, the institutional context affects innovation strategies in several ways (Lu et.al., 2008). The institution based view argues that the government has an important role in facilitating the infrastructure for innovation through regulative institutions (Tang, 2010). Amongst other things, this infrastructure can affect the possibilities for discovering entrepreneurial opportunities (Tang, 2010; Companys & McMullen 2007). In our empirical findings it is pointed out that Norway has a good infrastructure to develop new,

technological solutions. The framework of innovation procurement partnerships contributes to a more efficient infrastructure for knowledge sharing between procurer and supplier. In line with this, Morgan (1997) emphasize the need for the policies to contribute to increased knowledge capacity, as this is advocated as more efficient than focusing increased research funding.

Looking into the public sector's role as a facilitator for innovation, all of Osborn and Brown's (2013) flaws of innovation in the public sector are related to the public sector lacking an understanding of what innovation is. This hinders the development of institutions by public sector needed to foster innovation (Lu et. al., 2008). There are indicators that the Norwegian government has increased their efforts to accommodate the entrepreneurial needs over the last years, with a focus on user driven innovation. This can be seen as a step in order to involve the demand side in the innovation (Edler & Georghiou, 2007). The framework of innovation procurement partnership can be acknowledged as a contribution to foster innovation between the public and private sector in terms of regulative institutions. As discussed, the framework can be seen as a positive contribution to the innovation process, in terms of creating new mechanisms for collaboration and knowledge sharing, as well as creating a less rigid framework of the innovation process. However, we have raised some concerns regarding the timeframe of innovation, the need clarification, and the involvement of users. At this point in time, there are also unclarities regarding the implementation process.

7.3 How Does Innovation Procurement Partnerships Address the Element of Risk and Uncertainty?

Based on our data collection, risk and uncertainty come forward as a large obstacle for the private sector working with the public sector. It is therefore important to take these aspects into consideration when discussing how to make an innovation procurement partnership appealing to private organizations. Management of uncertainty can, therefore, be seen as crucial in order to succeed in an innovation procurement partnership (Hoholm, 2009).

From theory, we know that there is a difference between risk and uncertainty. It is important to recognize this difference when focusing on risk management, in order to minimize it. Where risk can be quantifiable, uncertainty relates to the lack of knowledge in a situation. However, this separation is not found in the empirics, indicating that the private and public actors do not separate between the two.

Looking into risk in an innovation procurement partnership, the high demand for resources is the most recognized risk among our interviewees, focusing on resources in terms of financial- and time-demanding. In general, there are usually high costs and large risks associated with an innovation for public sector by private sector (Gjesing-Johnrud, 2016). In addition, research shows that small and medium sized companies traditionally have an impaired competitive power in relation to public procurement (NOU 1997:21, 1997). The framework of an innovation procurement partnership can tempt small and medium sized firms, as it provides possibilities for reducing their risk. The current innovation procurement partnerships try to minimize these risks with mainly two elements. The first element regards funding from Innovation Norway. This can be seen as an important step to reduce risk, in order to include the small firms that cannot survive the process without additional funding. However, this only applies to the firms that win the contract and are a part of the development process (Appendix 3), it does not apply to the ones that spend resources trying to become a part of the development process. The other element can be connected to public sectors obligation to procure the solution in the end. Knowing that the solution will be procured after the process, provides the winners of the contract more resources to focus on the development, instead of sales, while securing their survival in the next years.

In the future, without funding from Innovation Norway, an important element to discuss in regards to risk is who should take the financial risk, public or private sector? With the open meetings in the market dialogue of the Stavanger project, the municipality reduced their use of resources while increasing the private actors' resource use. Going forward, it is suggested by some of our interviewees that a better solution for the private actors would be individual meetings, for instance

over Skype, to reduce their financial demands related to the process, in addition, to ensure their competitive situation. However, this will increase the resources demanded from the public actor, as it will require them to have as many meetings as there are interested firms, instead of gathering them all in one meeting.

Uncertainty is a bit more challenging in regards to an innovation procurement partnership, as it needs to be addressed without knowing the elements that are included. We found there to be several aspects to look into when considering uncertainty in the process of innovation procurement partnership, such as the development of the solution, implementation, and commercialization. Uncertainty regarding implementation was mentioned by some of our interviewees, while commercialization and the development process was omitted. The majority of our interviewees pointed towards the financial risk when talking about risk and uncertainty, indicating that they are less concerned about other types of uncertainty.

Firstly, uncertainty in the process can be related to the development of the solutions. Even though the plans are made and the solutions are sketched out, one can never be certain about the development process until it is completed. Effect uncertainty (McMullen & Shepherd, 2006) seems most relevant, as the future is unknown and one never know how the development process will turn out. Looking towards the end of the process, the implementation seems to be an important element connected to uncertainty, even though, it is not emphasized in the innovation procurement partnership framework (Appendix 4). The implementation uncertainty concern both the private and public sector. Response uncertainty (McMullen & Shepherd, 2006) is found to be the most relevant, as the uncertainty regarding implementation of our interviewees mostly regards to the users' response to the solution. This is in line with Van de Ven (1986) and Swanson and Ramiller (1997) that look into the institutions of implementation and argues that the implementation does not occur before there is the innovation is socially accepted. During our interviews, some private actors addressed a concern regarding the implementation process as they perceived public sector as slow. In addition to the implementation, there is uncertainty related to the

commercialization of the solution afterward for the private actors. Will the solution be scalable and relevant for others to take it into use? Will someone else come up with a better solution by the time their solution is ready to enter the market?

Taking the risk and uncertainty present in an innovation procurement partnership into consideration, private actors have to evaluate the outcomes of participation if they do not win the tender. A positive thing they can gain from participating is knowledge regarding the process and the potential network they have been building throughout the process. Looking at the negative aspects of losing, it loops back to the financial aspect and whether they have enough resources left if they do not win the tender contract.

With Innovation Norway financially supporting firms to be a part of the process the way they do today, it does not create a natural market situation. The real risk and uncertainty of participating in an innovation procurement partnership can therefore not be seen before the additional funding of the process disappears. The question would then be if the firms would still be willing to participate in the process, increasing their financial risk, or if the public sector executing the innovation procurement process would be willing to fund the firms along the way. If the public sector would not be willing to allocate resources to the firms involved in the process, one should consider if innovation procurement partnership is the best solution. This would require a change in the alleged risk aversion attitudes currently evident in the public sector.

As stated, management of uncertainty is important when it comes to innovation (Hoholm, 2009). To manage risk and uncertainty, it is important to obtain the relevant information (Chapman & Ward, 2011). This can be challenging as the different actors might not know which information to obtain, or which aspect to address. This can be exemplified by the challenges that arise when looking into the contradicting view of how much information to include in the declaration of the procurement. This can be a source of uncertainty and risk.

We have discussed several ways uncertainty and risk are evident within the framework of innovation procurement partnership. As long as innovation procurement partnerships is a fairly new framework in practice, the level of uncertainty might be higher. However, there will always be some level of uncertainty present in an innovation process (McMullen & Shepherd, 2006; Hoholm, 2009). Regarding risk, it is evident that the factor of financial risk is considered most important by our interviewees. Today's measures to address the financial risk of the winner of the tender can be seen as a step in the right direction with the intent of including more small and medium sized businesses. However, the process does still not address the financial risk that occurs for small businesses with limited resources who do not win the tender. It will be interesting to see how the financial risk of an innovation procurement partnership is managed in a setting were Innovation Norway does not contribute with funding.

7.4 How can Innovation Procurement Partnerships facilitate for Public and Private Sector Cooperation?

Looking into innovation procurement partnerships, cooperation between private and public sector are central, as it is crucial to develop new welfare solutions (Evald et. al., 2014). This section will, therefore, discuss cooperation between these sectors further, referring to official cooperation, regulated by procurement contracts.

It is important to keep in mind that the term partnership indicates equal partners, with increased value creation when cooperating (Mohr & Spekman, 1994). As introduced in 5.1.2, public-private innovations are generally made in order to improve the urban economy and quality of life (Harding, 1990, referenced in Osborne, 2002). The increased focus on public-private cooperation in Norway has been shown through several programs, in addition to innovation procurement partnership. The Norwegian government has started programs such as HO21 in order to increase this focus in the health care sector. Several of our interviewees point out that they believe public-private partnerships are moving in the right direction and has seen a change over the last years. Both the public and the private

actors we included in our study were enthusiastic about cooperation with the other sector going forward. However, we found that the dynamic of equality in an innovation procurement partnership is not a mentality adopted or emphasized by our interviewees.

Despite positive attitudes towards cooperation, it can still be argued that several challenges in regards to cooperation are evident. There still exists a skepticism between the public and private sector within the health care sector. Some of the basis for this skepticism can be explained by the institution based view and institutional differences. The question is if innovation procurement partnerships can contribute to improving the cooperation between private and public actors. In our findings, it was disclosed some concerns from public sector regarding the private sector's understanding of the public sector's need and if this could affect the possibilities for innovation. The public sectors skepticism towards the private sector's understanding might be reduced by a closer relationship between the private sector and the users, which can increase their understanding of the market's needs. Pointing out the skepticism between the sectors and the need to be reduced in order to collaborate efficiently, one have to question how realistic it is to overcome this. The skepticism are rooted in the informal institutions, and it might be challenging to change.

In our research, we found indicators of conflicting institutions, both in regards to normative and cultural cognitive systems (Scott, 2001). Looking at the statements from our empirical findings related to investments and risk, several interviewees point out examples of the public sectors alleged risk aversion, such as reluctance of innovative procurements. This can be seen as an indicator of how the norm of private companies that consider long term investments can be in conflict with the norm of public administration's focus primarily on budget and costs.

There is a related phenomenon which can be defined as cultural-cognitive systems. From the entrepreneurial point of view, it is an acceptance of risk, in contrast, our interviewees from the private sector believe there is a risk aversion in the public sector, visible through slowness in decision-making and phenomenon

such as “the pilot disease”. The public sector’s risk aversion has been labeled as a culture of fear by several of our interviewees. These contradictory normative and cultural-cognitive aspects, and especially the latter which is the most difficult to identify and articulate, might explain some of the barriers and unsuccessful attempts of public and private cooperation in the past.

The different views on risk in the sectors are recognized as one of the challenges of public-private cooperation by our interviewees. With the large amount of financial resources present in Norway, it makes it possible to avoid the unpopular decisions on a political level, and thus might lead to this aversion among the public sector. This is supported by theory, that sees mismanagement due to an abundance of resources as a challenge within the Norwegian health care sector (Björnberg, 2017). In line with this, some interviewees pointed out that the overall wealth in the Norwegian welfare system can be a factor for creating the risk aversion in the public sector. This as the wealth makes it easier to avoid making choices that involve risk. While decisions in the private sector are often related to a mindset of the overall good for the business, decisions in the public sector might be more related to the budget of the specific department the decision is made within. This may be a source of division between the sectors, as these focuses do not necessarily cope well together. Looking towards the private sectors mindset of long-term focus, the mechanisms found in the framework of innovation procurement partnerships address this. This relates to mechanisms such as commitment to buy the solution before it is developed and financial support along the way.

The level of fragmentation in the public health care sector leads to dispersed decision making authority (Fivelsdal & Sterri, 2018). This might be seen as some of the institutional contexts which foster risk aversion and leads to phenomenon such as “the pilot disease”. The level of fragmentation in public administration in general and in the health care sector has several consequences. A traditional conflict due to fragmentation regards lack of cooperation between the primary and specialist health care sector (Björnberg, 2017). This conflict is also pointed out by some of our interviewees, supported by reports showing that patients that are

dissatisfied with the waiting lists of the Norwegian health care sector, in addition to communication between the primary and specialist health care sector. The fragmented structure of the Norwegian health care sector goes hand in hand with increased bureaucracy (Skihamn, 2017). This fragmentation makes it challenging for private actors to respond to the public sector, as the process of getting a decision through can be seen as complex and overwhelming. This as it often needs to be approved by different actors in the bureaucracy. Therefore, one has to ask if the fragmentation and bureaucracy of the health care systems can be a hinder of innovation.

It is noted that the structure behind the procurement regulations should foster cooperation between different actors of the bureaucracy (Uyarra & Flanagan, 2010). This indicates that by having a specific actor within the public sector working to clarify their need in the first phases of the process, one hopes to minimize the fragmentation issue in the sector. This as the sector holding the authority to do such a process, should hold the authority to make decisions regarding that process. As an example, it was pointed out in the Stavanger project that the project had support on different levels within the municipality, making the decision process less bureaucratic. As a result, innovation procurement partnerships can increase the cooperation between the private and public sectors in the long run.

The public sector in Norway is highly regulated, and its actions will, therefore, be notably affected by the law, both national and international (Europalov, 2017). The level of regulations imposed by law on the private companies in Norway is considered as high in an international context. An interesting phenomenon here concerns how the projects we have studied and the actors we have talked to operate within the interface of the public and private sector. The challenge lies in how the actors need to adjust their behavior to consider and answer to regulations for both sectors. We would argue this is relevant in a more substantial way than when they are not in a formal partnership.

Entering into an innovation procurement partnership, the public sector needs to make several considerations, especially in regards to creating a project management that understands the private sectors needs and competitive situation. The private sector interviewees consider the success of the project as deeply dependent on the public sectors ability to recruit the right talents with the desired competence in the project group to successfully and effectively manage the process. As of today, there are no formal requirements of what competence should be found in a project group, however, several of our interviewees point out some competence they expect to find in a project group. This is in line with the development of institutions, as one depends on normative institutions in the absence of formal institutions (Scott, 2001). In addition, to create a competent project management, this team needs to gain an understanding of the private sectors competitive situation. In the market dialogue, firms are expected to share ideas in plenum, in front of their competitors. This can hinder the collaboration in the process, as it can challenge the culture of competition between the firms.

On a general basis to make an innovation procurement partnership successful the sectors need to share compatible goals, strive for mutual benefit, and acknowledge a high level of mutual interdependence (Mohr & Spekman, 1994). This can be seen as the basics of the framework for innovation procurement partnerships, as the main purpose for both sides is to contribute to an improved solution in the health care sector by cooperation. In addition, the private sectors goal of income is important to keep in mind, as this is not necessarily in line with the public sectors goals unless they see the value of industry development. Based on our data collection, one can ask if the public sector has not realized their power to direct the development of the industry. On the other side, private sector might need to elaborate their understanding of the public sector, in order to share compatible goals. As pointed out in our findings, the private actors focused mainly on the barriers within the procuring organizations during our interviews, instead of self-evaluation. By evaluating their own strategies and choices in their approach to deliver a tender, they might discover different strategies for working towards innovative tender processes with public actors.

Going back to the initial question if innovation procurement partnership can contribute to improved cooperation between public and private sector, there are some indicators of the framework addressing some of the challenges which exist between the sectors today. The framework shows potential in decreasing some of the uncertainty experienced by private actors and provides more channels for communication and building relations between the sectors. However, it indicates that new challenges will arise as new frameworks, regulations, and practices are taken in use, as we have demonstrated. We argue that based on institution based view, one of the greatest barriers for public-private collaboration is their normative and cultural differences, in addition to a lack of understanding and the acknowledgement of these differences. In order to obtain success in a partnership, it would require a reduction of the existing skepticism between public and private sector and an increased understanding of their contrasts. The legal framework of innovation procurement partnerships is a step in the right direction of changing the regulative institutions. However, one could ask if further regulative institutions should be introduced in order to speed up the change of normative and cultural cognitive institutions in order to facilitate for increased collaboration.

8.0 Conclusion and Implications

Several aspects are addressed in our thesis in order to answer our research question; *How can innovation procurement partnerships contribute to innovation between public and private sector?* Our research question has been addressed by discussing three essential aspects of the innovation process and the surrounding institutions; the development of an idea, risk, and uncertainty, and cooperation. We have emphasized the context of the phenomena and private organizations in our research, and through institution based view identified both enablers and barriers to innovation within the context of innovation procurement partnerships.

From our research, it is evident that institutions can affect innovation procurement partnership, both regulatively, normatively, and culturally cognitive. As the regulative institutions are evident through the framework of innovation procurement partnership, the normative and cultural cognitive institutions are found to be more interesting in this context. Regulative institutions can be seen to create the framework as a demand-side policy, while normative and cognitive cultural institutions might be a cause of conflict due to the institutional differences between the actors. However, innovation procurement partnerships provide new infrastructure for innovation through formal institutions, which over time can lead to an institutional change in regards to normative and cultural institutions. These institutions explain some enablers and barriers to collaboration besides the regulative framework.

Enablers for innovation procurement partnerships can be found in the mechanisms in the regulative framework, positive attitudes from the sectors, and the funding from Innovation Norway. The mechanisms in the regulative framework is an enabler by itself, as they are less rigid than previous frameworks, in addition to the increased possibilities for dialog and knowledge sharing, while involving more collaborative efforts from actors. The positive attitudes from the sectors are a step in the right direction of changing normative and cultural cognitive institutions that may have hindered cooperation in the past, such as the indicated skepticism towards the other inherent in public-private relationships. Even though the

funding from Innovation Norway creates an unnatural market situation, it makes the public sector take the new framework into use, while attracting small and medium sized businesses to participate.

Barriers to innovation procurement partnership are found among the normative and cultural cognitive institutions, which we have identified as institutional differences. We have argued that these differences can be the source of the lack of understanding and skepticism towards each other. This can be seen as a hinder for efficient collaboration and thus the innovation in an innovation procurement partnership.

8.1 Managerial and Policy and Policy Implications

There are several indicators of practical managerial and policy implications on how to facilitate for innovation between the sectors within the framework of innovation procurement partnership. The most prominent managerial implication evident from our study is the need for a mutual understanding of the actors' roles and expectations. In addition, our findings indicate that it is important with enough resources devoted to the project, and a project management made up of competent people. Our research further indicates some issues and implications regarding the need clarification process. It is important to carefully evaluate what the actual need is, and not create limitations for the solution by being too specific. When working towards an innovative solution, it is important to be open to new, radical innovation, instead of locking the mindset to a certain type of solution. This as an innovation procurement partnership can be seen as too comprehensive to use on incremental innovations.

In our discussion we point to some issues which we argue should be a subject of consideration. Firstly, this refers to the timeframe of the innovation procurement partnership. Our findings indicate that there might be a fine line between what is considered as too slow and when there is not enough time to create a quality solution. This is both regarding the specific phases such as the market dialog, and the process as a whole. In addition, considerations regarding the implementation of the new solutions should be made. As we have pointed out, there is a lacking

emphasis on the implementation of the new idea in the framework, although this is an essential part of the innovation process. In regards to the market dialogue, we found three specific elements that can be evaluated based on private organizations needs. The competitive situation of the firms, the resources demanded to participate, and feedback mechanisms all points towards reconsidering today's execution of the market dialogue. This as the funding from Innovation Norway helps the winning firms but does not address the challenge for the firms that do not win the tender, and one should, therefore, strive to reduce the resources demanded to participate in the market dialogue.

In regards to policy implications, decision making power within the bureaucracy needs to be considered. We suggest that the project management team should have a certain degree of decision making power. Further, policies for how and to what extent the user should be involved in the innovation process can be evaluated. As discussed, a high degree of involvement of the user can contribute to limiting the innovation scope, which is a downside of the current policy.

9.0 Limitations and Further Research

As innovation procurement partnership is a new phenomenon in Norway, there is a lack of empirical research exploring the phenomena, limiting our possibilities from building on previous research. In light of this, we saw the need for a qualitative study, but it follows that our findings are not generalizable. However, we believe our research could be transferable to some extent in a discussion of the phenomena of innovation procurement partnership on a conceptual level. An important limitation being the context of the health care sector. This as some of the institutional norms and cultural cognitive aspects discussed in our paper are specific to the Norwegian health care sector and might vary within other sectors.

The scope of our thesis limits our findings, both in terms of the emphasis on the private perspective and time frame of the study. The private perspective emphasized through our interviewees simplifies the complexity of the reality. By limiting the representation of other perspectives, one might exclude some important viewpoints from the research. The time frame of our study, unfortunately, implicate a lack of inclusion of the entire process or realized results, both in terms of participating firms' future and the explicit value for society.

9.1 Future Research

From our research, we can argue for several aspects that can be a subject to future research. In regards to our chosen theoretical lens, the institution based view, we believe it could be useful to conduct further research on the differences between regulative, normative, and cultural cognitive institutions. This to further define their distinct features, roles, and effects in an empirical setting. With a focus on innovation procurement partnerships, we also see a potential to explore the phenomenon in light of other branches of research. The framework provides a new context for studying management of innovation in the interface between public and private sector. This includes the management of knowledge between the sectors, as an increased knowledge sharing between the actor, are one of the potential strengths of the framework. In addition, innovation procurement

partnerships can be researched with more emphasis on innovation theory to further develop the framework.

As our study is executed in a preliminary phase of innovation procurement partnerships, in the combination of limited resources, several limitations to our study occur. Therefore, our aim has been to provide some foundation for an understanding of the phenomenon, as our study is not generalizable, but can present some indications for quantitative research in the future and interesting concepts which can be explored further. An important aspect for future research can be including the finalized results and the total value creation. Our scope is a simplification of a complex reality and other stakeholders viewpoints may be included in future research. In addition, the perspective of private organizations can be further distinguished by organizational features such as resources and size, as we believe there exist differences here that are not evident in our research.

References

- Björnberg, A. (2018). Euro Health Consumer Index 2017. *Health Consumer Powerhouse*. Retrieved from:
<https://healthpowerhouse.com/files/EHCI-2017/EHCI-2017-report.pdf>
- Borgan, J. K. (2012). Pleie- og omsorgsstatistikk 1962-2010. Statistics Norway. Retrieved from:
https://www.ssb.no/a/publikasjoner/pdf/rapp_201210/rapp_201210.pdf
- Braaten, F. (2018). Det nye sykehuset skulle ha 0 korridorpasienter. I fjor måtte 3800 ligge på gangen. Retrieved from:
<https://www.aftenposten.no/amagasinet/i/jPa0Rw/Det-nye-sykehuset-skulle-ha-0-korridorpasienter-I-fjor-matte-3800-ligge-pa-gangen>
- Bryman, A., & Bell, E. (2015). *Business research methods*. (4th ed.) Oxford University Press, USA.
- C3. (2016). Annual report 2015. Retrieved from:
<https://www.c3connectedcare.org/loadFile.php?fileid=43f0b15d-d90e-4edf-8844-bc175c6c3d80>
- C3. (2017). Et SLAG for fremtidens helsetjeneste [Internal project document].
- C3. (2018a). About C3. Retrieved from:
https://www.c3connectedcare.org/about_c3.html
- C3. (2018b). Annual report 2016. Retrieved from:
<https://www.c3connectedcare.org/loadFile.php?fileid=1f372d51-8a36-4bcc-bbb8-3e896a7138aa>
- C3, Oslo Kommune & Sunnaas Sykehus. (2017). Arbeidsdokument forberedelser til SLAG prosjekt [PowerPoint presentasjon, internal project document]
- Cambridge Dictionary. (2018a). Uncertainty. Retrieved from:
<https://dictionary.cambridge.org/dictionary/english/uncertainty>
- Cambridge Dictionary. (2018b). Risk. Retrieved from:
<https://dictionary.cambridge.org/dictionary/english/risk>
- Change Healthcare. (2018). Change Healthcare Releases 8th Annual Industry Pulse Report. Retrieved from:
<https://www.prnewswire.com/news-releases/change-healthcare-releases-8th-annual-industry-pulse-report-300596765.html>
- Chapman, C., & Ward, S. (2011). *How to manage project opportunity and risk: Why uncertainty management can be a much better approach than risk management*. John Wiley & Sons.

Christensen, A. (2015). Hva skal vi med en matematiker i operasjonssalen? Retrieved from: <https://forskning.no/2015/09/matematiker-i-operasjonssalen>

Christensen, J. & Berg, O.T. (2018). velferdsstat. *Store norske leksikon*. Retrieved from: https://snl.no/velferdsstat#-Den_norske_velferdsstaten

Companys, Y. E., & McMullen, J. S. (2007). Strategic entrepreneurs at work: the nature, discovery, and exploitation of entrepreneurial opportunities. *Small Business Economics*, 28(4), 301-322.

Corbin, J., Strauss, A., & Strauss, A. L. (2014). *Basics of qualitative research*. Sage.

Damvad & Oslo Economics. (2011). Behovsdrevet innovasjon og næringsutvikling i helsesektoren. Retrieved from: <https://beta.legeforeningen.no/contentassets/a6de4117757a49c7ba1895134c739849/innovasjon-evaluering-rapport.pdf>

Dacin, M. T. (1997). Isomorphism in context: The power and prescription of institutional norms. *Academy of management journal*, 40(1), 46-81.

Dacin, M. T., Oliver, C., & Roy, J. P. (2007). The legitimacy of strategic alliances: An institutional perspective. *Strategic Management Journal*, 28(2), 169-187.

De Moor, K., Berte, K., De Marez, L., Joseph, W., Deryckere, T., & Martens, L. (2010). User-driven innovation? Challenges of user involvement in future technology analysis. *Science and Public Policy*, 37(1), 51-61.

Dewar, R. D., & Dutton, J. E. (1986). The adoption of radical and incremental innovations: An empirical analysis. *Management science*, 32(11), 1422-1433.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research*. Sage.

Dictionary. (2018a). Partnership. Retrieved from: <http://www.dictionary.com/browse/partnership?s=t>

Dictionary. (2018b). Successful. Retrieved from: <http://www.dictionary.com/browse/successful?s=t>

Difi. (2015). Innovasjonspartnerskap – ny kontraktsform/prosedyre i nytt regelverk om offentlige anskaffelser [Movie]. Retrieved from: <https://vimeo.com/131096435>

Difi. (2017a). Anskaffelsesordbok. Retrieved from: <https://www.anskaffelser.no/gjore-anskaffelser/anskaffelsesfaglige-temaer/anskaffelsesordbok>

Difi. (2017b). Regelverk for offentlige anskaffelser. Retrieved from: <https://www.anskaffelser.no/gjore-anskaffelser/anskaffelsesfaglige-temaer/regelverk>

- Difi. (2017c). Anskaffelser under 1,1 mill. kroner. Retrieved from: <https://www.regjeringen.no/no/tema/naringsliv/konkurransopolitikk/offentlige-anskaffelser-/andre-kolonner/terskelverdier/id2522847/>
- Difi. (2018a). Innovasjonspartnerskap. Retrieved from: <https://www.anskaffelser.no/prosess/innovasjonspartnerskap>
- Difi. (2018b). Innovasjonspartnerskap hos Stavanger, Bergen, Vegvesenet, Sykehuset i Østfold og C3. Retrieved from: <https://www.anskaffelser.no/verktoy/innovasjonspartnerskap-hos-stavanger-bergen-vegvesenet-sykehuset-i-ostfold-og-c3>
- Difi. (2018c). Konkurransgrunnlag for innovasjonspartnerskap. Retrieved from: <https://www.anskaffelser.no/verktoy/konkurransgrunnlag-innovasjonspartnerskap>
- DiMaggio, P. J., & Powell, W. W. (2000). The iron cage revisited institutional isomorphism and collective rationality in organizational fields. In *Economics Meets Sociology in Strategic Management* (pp. 143-166). Emerald Group Publishing Limited.
- Dubois, A., & Gadde, L. E. (2002). Systematic combining: an abductive approach to case research. *Journal of business research*, 55(7), 553-560.
- Dubois, A., & Gadde, L. E. (2014). “Systematic combining”—A decade later. *Journal of Business Research*, 67(6), 1277-1284.
- Edler, J., & Georghiou, L. (2007). Public procurement and innovation—Resurrecting the demand side. *Research policy*, 36(7), 949-963.
- Edquist, C., Vonortas, N. S., Zabala-Iturriagoitia, J. M., & Edler, J. (Eds.). (2015). *Public procurement for innovation*. Edward Elgar Publishing.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of management journal*, 50(1), 2532.
- Ettlie, J. E., Bridges, W. P., & O'keefe, R. D. (1984). Organization strategy and structural differences for radical versus incremental innovation. *Management science*, 30(6), 682-695.
- Europalov. (2017). Innkjøpsdirektivet (revisjon). Retrieved from: <http://www.europalov.no/rettsakt/innkjopsdirektivet-revisjon/id-5217>
- European Commission. (2014). *Public Procurement as a Driver of Innovation in SMEs and Public Services*. Belgium: European Union
- European Commission. (2017). *Public procurement strategy*. Retrieved from: http://ec.europa.eu/growth/single-market/public-procurement/strategy_en
- European Commission. (2018). *Public Procurement*. Retrieved from: https://ec.europa.eu/growth/single-market/public-procurement_en

- Evald, M. R., Nissen, H. A., Clarke, A. H., & Munksgaard, K. B. (2014). Reviewing cross-field Public Private Innovation literature: Current research themes and future research themes yet to be explored. *International Public Management Review*, 15(2), 32-57.
- Fivelsdal, E. and Sterri, A. B. (2018). Byråkrati. *Store Norske Leksikon*. Retrieved from: <https://snl.no/byr%C3%A5krati>
- Folkehelseinstituttet. (2014). Helse hos eldre. Retrieved from: <https://www.fhi.no/nettpub/hin/helse-i-ulike-befolkningsgrupper/helse-hos-eldre-i-norge---folkehels/>
- Folkehelseinstituttet. (2015). Folkehelse i Norge 1814–2014. Retrieved from: <https://www.fhi.no/nettpub/hin/folkehelse-i-historien/folkehelse-i-norge-1814---2014/#folkehelse-i-historisk-perspektiv>
- Folkehelseinstituttet. (2016). Commonwealth Funds undersøkelse av helsetjenestesystemet i elleve land: Norske resultater i 2016 og utvikling over tid. Retrieved from: <https://www.fhi.no/globalassets/dokumenterfiler/rapporter/commonwealth-funds-undersokelse-av-helsetjenestesystemet-i-elleve-land.pdf>
- Folkehelseinstituttet. (2017). Andelen personer over 65 år i befolkningen. Retrieved from: <https://www.fhi.no/hn/eldre/andelen-personer-over-65-ar-i-befol/>
- Forskningsrådet. (2014). HelseOmsorg21. Retrieved from: https://www.regjeringen.no/contentassets/8ab2fd5c4c7746dfb51e3f64cd4d71aa/helseomsorg21_strategi_web.pdf?id=2266705
- Garud, R., Tuertscher, P., & Van de Ven, A. H. (2013). Perspectives on innovation processes. *Academy of Management Annals*, 7(1), 775-819.
- Gjessing-Johnrud, J. B. (2016). Drømmeløftet 2016: Helse og velferd. Innovation Norway. Retrieved from: <http://www.xn--drmmelftet-1cbe.no/wp-content/uploads/2016/08/Helseogvelferd.pdf>
- Gulbrandsen, P., Clayman, M. L., Beach, M. C., Han, P. K., Boss, E. F., Ofstad, E. H., & Elwyn, G. (2016). Shared decision-making as an existential journey: aiming for restored autonomous capacity. *Patient education and counseling*, 99(9), 1505-1510.
- Helse- og omsorgsdepartementet. (2014a). HelseOmsorg21 - Et kunnskapssystem for bedre folkehelse. Retrieved from: https://www.regjeringen.no/contentassets/8ab2fd5c4c7746dfb51e3f64cd4d71aa/helseomsorg21_strategi_web.pdf?id=2266705
- Helse- og omsorgsdepartementet. (2014b). HelseOmsorg21. Retrieved from: <https://www.regjeringen.no/no/dokumenter/HelseOmsorg21/id764389/>

Hoholm, T. (2009). The contrary forces of innovation: An ethnography of innovation processes in the food industry.

Hoholm, T., & Huse, M. (2008). Brukerdrevet innovasjon i Norge. Obtained from: <https://www.magma.no/brukerdrevet-innovasjon-i-norge>

Idsø, J. (2018). Offentlig sektor. Store norske leksikon. Retrieved from: https://snl.no/offentlig_sektor

InnoMed, Helsedirektoratet, Helse Midt-Norge, SINTEF. (2017). Behovsdrevet Innovasjon. Retrieved from: http://innomed.no/uploads/10_steg_til_innovasjon_i_helsesektoren_1.pdf

Innovasjon Norge. (2016). Drømmeløftet 2016: Helse og velferd. Retrieved from: <http://www.xn--drmmelftet-1cbe.no/wp-content/uploads/2016/08/Helseogvelferd.pdf>

Innovasjon Norge. (2018a). Stavanger kommune leder vei innen innovasjonspartnerskap. Retrieved from: <https://www.innovasjon norge.no/no/nyheter-liste/2018/stavanger-kommune-leder-vei-innen-innovasjonspartnerskap/>

Innovasjon Norge. (2018b). Fire vinnere skal utvikle fremtidens løsninger for det offentlige. Retrieved from: <http://www.innovasjon norge.no/no/nyheter-liste/2017/fire-vinnere-skal-gi-naringslivet-oppdraget-med-a-utvikle-fremtidens-losninger-for-det-offentlige/>

Innovative anskaffelser. (2017). Resultater. Retrieved from: <http://innovativeanskaffelser.no/resultater/>

Jakobsen, S. E., Amundsen, B. (2016). Innovasjon i helsesektoren. Forskningsrådet. Retrieved from: https://www.forskningsradet.no/no/Nyheter/Innovasjon_i_helsesektoren/1253969755202

Jakobsen, E. W., Nellesmann, R. G., Skogli, E. og Theie, M. G.(2016). Verdiskaping i Helsenæringen (Menon Publication 27/2016). Retrieved from: <http://www.menon.no/wp-content/uploads/2016-27-Verdiskaping-i-helsen%C3%A6ringen.pdf>

Leknes, B. O. (2016). Systemene blir bedre når pasientene får bidra. Retrieved from: <https://forskning.no/2016/10/pasientene-ma-med-i-systemutviklingen/produisert-og-finansiert-av/nord-universitet>

Leonardsen, A. C. L. (2017). Pasienter vil heller ha behandling i hjemkommunen enn på sykehus. Forskning.no. Retrieved from: <https://forskning.no/helse-helsepolitikk-helsetjenester/2017/06/pasienter-foretrekker-behandling-i-hjemkommunen-ikke>

LeRoy, S. F., & Singell Jr, L. D. (1987). Knight on risk and uncertainty. *Journal of political economy*, 95(2), 394-406.

Lu, Y., Tsang, E. W., & Peng, M. W. (2008). Knowledge management and innovation strategy in the Asia Pacific: Toward an institution-based view.

Mark, M., Flatval, V.S. & Røtnes, R. (2015). *Markedet for velferdsteknologiske løsninger*.

<https://www.nho.no/siteassets/nhos-filer-og-bilder/filer-og-dokumenter/helse/markedet-for-velferdsteknologiske-losninger-endelig-rapport.pdf>

McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management review*, 31(1), 132-152.

McNamara, C. (2009). General guidelines for conducting interviews. Retrieved January 31st, 2018, from <http://managementhelp.org/evaluatn/intrview.htm>

Mohr, J., & Spekman, R. (1994). Characteristics of partnership success: partnership attributes, communication behavior, and conflict resolution techniques. *Strategic management journal*, 15(2), 135-152.

Morgan, D., Gmeinder, M. and Wilkens, J. (2017). An OECD Analysis of Health Spending in Norway. OECD Health Working Papers, No. 19. Retrieved from: [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DELSA%2FHEA%2FWD%2FHWP\(2017\)1&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DELSA%2FHEA%2FWD%2FHWP(2017)1&docLanguage=En)

Morgan, K. (1997). The Learning Region: Institutions, Innovation and Regional Renewal. *Regional Studies*, Vol. 31.5, pp. 491-503

NHI. (2018). Hjerneslag. Retrieved from:

<https://nhi.no/sykdommer/hjernenesystem/hjerneslag-og-blodninger/hjerneslag/?page=2>

Norsk forskningsråd. (2018). Behandling av slagpasienter. Retrieved from:

https://www.forskningsradet.no/bibliotek/publikasjoner/slagpasienter_r8_norsk/06.html

Norway Health Tech. (2017). “Skulle ønske jeg hadde” – Metode for bruker og behovsdrevet innovasjon i helse. Retrieved from:

<https://ushtakerhus.files.wordpress.com/2017/11/4-skulle-c3b8nske-jeg-hadde-me-todikken.pdf>

Norwegian Smart Care Cluster. (2018). Første bedriftsoppdrag for Norwegian Smart Care Lab. Retrieved from:

<https://www.smartcarecluster.no/aktuelt/2018/2/storskalatesting-for-norwegian-smart-care-lab>

NOU 1997:21. (1997). Offentlige anskaffelse. Retrieved from:

<https://www.regjeringen.no/no/dokumenter/nou-1997-21/id141007/>

- Nrk. (2018). 21. februar 2018. Retrieved from:
<https://www.nrk.no/ostfold/uheldig-a-skyld-pa-kommunene-1.13926704>
- Nøra, S. (2014). Slagpasienter får ikke nødvendig hjelp. Forskningsrådet. Retrieved from:
<https://forskning.no/forebyggende-helse-fysioterapi-helsepolitikk-sykdommer-trening/2014/03/slagpasienter-far-ikke>
- OECD. (2011). Demand-side Innovation Policies, OECD Publishing.
<http://dx.doi.org/10.1787/9789264098886-en>
- OECD. (2015). Doctor consultations. Retrieved from:
<https://data.oecd.org/healthcare/doctors-consultations.htm>
- OECD. (2016). Health Spending. Retrieved from:
<https://data.oecd.org/healthres/health-spending.htm>
- OECD (2017), Health at a Glance 2017: OECD Indicators, OECD Publishing, Paris.
http://dx.doi.org/10.1787/health_glance-2017-en
- Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic management journal*, 697-713.
- Osborne, S. (2002). Public-private partnerships: Theory and practice in international perspective. Routledge.
- Osborne, S. P., & Brown, L. (Eds.). (2013). Handbook of innovation in public services. Edward Elgar Publishing.
- Oslo kommune. (2017). Byrådets forslag til budsjett 2018 og økonomiplan 2018-2021. Retrieved from:
https://www.oslo.kommune.no/getfile.php/13257407/Innhold/Politikk%20og%20administrasjon/Budsjett%20regnskap%20og%20rapportering/Budsjett%2018/unzipped_krnl_fileid_248678/PDFS_Budsjett-2018.1.pdf?download=1
- Oslo Universitetssykehus. (2018). Om oss. Retrieved from:
<https://oslo-universitetssykehus.no/om-oss#>
- Peng, M. W. (2002). Towards an institution-based view of business strategy. *Asia Pacific Journal of Management*, 19(2-3), 251-267.
- Peng, M. W., Sun, S. L., Pinkham, B., & Chen, H. (2009). The institution-based view as a third leg for a strategy tripod. *Academy of Management Perspectives*, 23(3), 63-81.
- Peng, M. W., Wang, D. Y., & Jiang, Y. (2008). An institution-based view of international business strategy: A focus on emerging economies. *Journal of international business studies*, 39(5), 920-936.

Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International journal of nursing studies*, 47(11), 1451-1458.

Powell, W. W., & DiMaggio, P. J. (Eds.). (2012). *The new institutionalism in organizational analysis*. University of Chicago Press.

Proff. (2018a). Innocom AS. Retrieved from:
<https://www.proff.no/selskap/innocom-as/drammen/bedriftsr%C3%A5dgivning/IF7IQM8043Z/>

Proff. (2018b). Topro Industri AS. Retrieved from:
<https://www.dagsavisen.no/rogalandsavis/utvikler-smarte-losninger-for-eldre-1.1105806>

Regjeringen. (2017a). Terskelverdier. Retrieved from:
<https://www.regjeringen.no/no/tema/naringsliv/konkurransopolitikk/offentlige-anskaffelser-/andre-kolonne/terskelverdier/id2522847/>

Regjeringen. (2017b). Dokumentasjonsplikten og anskaffelsesprotokoll. Retrieved from:
<https://www.regjeringen.no/no/tema/naringsliv/konkurransopolitikk/offentlige-anskaffelser-/andre-kolonne/dokumentasjonsplikten-og-anskaffelsesprotokoll/id2539133/>

Regjeringen. (2018). Hva er innovasjon? Retrieved from:
<https://www.regjeringen.no/no/tema/naringsliv/forskning-og-innovasjon/hva-er-innovasjon/id526485/>

Rosted, J. (2005). User-driven innovation. *Results and recommendations. Copenhagen: Fora*. Retrieved from:
<https://boligejer.dk/file/7321/userdriveninnovation.pdf>

Ruttan, V. W., & Hayami, Y. (1984). Toward a theory of induced institutional innovation. *The Journal of Development Studies*, 20(4), 203-223.

Røsjø, B. (2014). Pasientene får makt i helseforskningen. Retrieved from:
<https://forskning.no/helse-helsepolitikk-helsetjeneste-helseadministrasjon/2014/12/pasientene-far-makt-i-helseforskningen>

Scott, R.W. (2001). *Institutions and organizations*. Thousand Oakes, CA: Sage Publications Inc. Chapters 2 and 3.

Seidman, I. (2013). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. Teachers college press.

Seo, M. G., & Creed, W. D. (2002). Institutional contradictions, praxis, and institutional change: A dialectical perspective. *Academy of management review*, 27(2), 222-247.

Silverman, D. (2013). *Doing qualitative research: A practical handbook*. SAGE Publications Limited.

Skiphamn, S. (2017). Nei, det har ikke vært tidenes oppbygging av byråkrati i Oslo. Retrieved from:
<https://www.faktisk.no/faktasjekker/dK/under-denne-regjeringen-har-det-vaert-tid-enes-oppbygging-av-byrakrati-og-konsulentbruk-i-oslo>

SSB. (2017a). Helseregnskap. Retrieved from:
<https://www.ssb.no/nasjonaltregnskap-og-konjunkturer/statistikker/helsesat>

SSB. (2017b). Fakta om helse. Retrieved from:
<https://www.ssb.no/helse/faktaside/helse>

SSB. (2017c). Betydelige forskjeller i bruk av kommunale omsorgstjenester blant eldre. Retrieved from:
<https://www.ssb.no/helse/artikler-og-publikasjoner/betydelige-forskjeller-i-bruk-av-kommunale-omsorgstjenester-blant-eldre>

SSB. (2017d). Nøkkeltall for befolkning. Retrieved from:
<https://www.ssb.no/befolkning/nokkeltall/befolkning>

SSB. (2018a). Stavanger - 103 (Rogaland). Retrieved from:
<https://www.ssb.no/kommunefakta/stavanger>

SSB. (2018b). Oslo - 0301 (Oslo). Retrieved from:
<https://www.ssb.no/kommunefakta/oslo>

Stavanger kommune. (2017a). Invitasjon til markedsdialog. Retrieved from:
<http://innovativeanskaffelser.no/wp-content/uploads/2017/02/invitasjon-til-markedsdialog.pdf>

Stavanger kommune. (2017b). Handlings- og økonomiplan 2018-2021. Retrieved from:
https://www.stavanger.kommune.no/siteassets/samfunnsutvikling/planer/hop-og-budsjett/hop_kortversjon2018-2021_enkeltsider.pdf

Stavanger Region European Office. (2017). STAVANGER KOMMUNE INNGÅR NORGES FØRSTE INNOVASJONSPARTNERSKAP. Retrieved from:
<https://stavangerregion.no/2017/02/28/stavanger-kommune-inngar-norges-forste-innovasjonspartnerskap/>

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of management review*, 20(3), 571-610.

Sunnaas Sykehus. (2017). Sak 61/17 Budsjett 2018. Retrieved from:
<https://www.sunnaas.no/Documents/Styredokumenter/2017/Sak%206117%202017-12-14%20Budsjett%202018.pdf>

Sunnaas Sykehus. (2018). Om oss. Retrieved from:
<https://www.sunnaas.no/om-oss#>

Swanson, E. B., & Ramiller, N. C. (1997). The organizing vision in information systems innovation. *Organization science*, 8(5), 458-474

Tang, J. (2010). How entrepreneurs discover opportunities in China: An institutional view. *Asia Pacific Journal of Management*, 27(3), 461-479.

Taylor, S. J., Bogdan, R., & DeVault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource*. John Wiley & Sons.

Topro. (2018). Om Topro. Retrieved from: <http://www.topro.no/organisasjonen/>

Turner III, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *The qualitative report*, 15(3), 754.

Understanding user-driven innovation. (2006). Retrieved from
<https://ebookcentral-proquest-com.ezproxy.library.bi.no>

Uyarra, E., Edler, J., Garcia-Estevez, J., Georghiou, L., & Yeow, J. (2014). Barriers to innovation through public procurement: A supplier perspective. *Technovation*, 34(10), 631-645.

Uyarra, E., & Flanagan, K. (2010). Understanding the innovation impacts of public procurement. *European Planning Studies*, 18(1), 123-143.

Van de Ven, A. H. (1986). Central problems in the management of innovation. *Management science*, 32(5), 590-607.

Vlaskovits, P. (2011). Henry ford, innovation, and that 'Faster Horse' quote. *Harvard Business Review*, 29.

Waage, T. E. (2018). Utvikler smarte løsninger for eldre. *Dagsavisen*. Retrieved from:
<https://www.dagsavisen.no/rogalandsavis/utvikler-smarte-losninger-for-eldre-1.1105806>

Wold, H., & Jureen, L. (1953). *Demand analysis*. John Wiley And Sons, Inc.; New York.

WHO. (2016). *World Health Statistics 2016: Monitoring health for the SDGs*. retrieved from:
http://www.who.int/gho/publications/world_health_statistics/2016/en/

WHO. (2017). *Noncommunicable diseases*. Retrieved from:
<http://www.who.int/mediacentre/factsheets/fs355/en/>

Wickham, P. A. (2006). *Strategic entrepreneurship 4th edition*. London: Prentice Hall. Pearson Education.

WTO. (2018a). Parties, observers and accessions. Retrieved from:
https://www.wto.org/english/tratop_e/gproc_e/memobs_e.htm

WTO. (2018b). Text of the Agreement. Retrieved from:
https://www.wto.org/english/tratop_e/gproc_e/gpa_1994_e.htm

Zahra, S. A., & Das, S. R. (1993). Innovation strategy and financial performance in manufacturing companies: An empirical study. *Production and operations management*, 2(1), 15-37.

Appendix

Appendix 1 - Interview Guide

Utkast Intervjuguide - til bedrifter som har vært med i prosessen av innovasjonspartnerskap

Hensikten er å få private bedrifters synspunkt på innovasjonspartnerskap, slik at man kan øke forståelsen av hva som gjør at bedrifter ønsker å være en del av et innovasjonspartnerskap. I tillegg ønsker vi å finne ut av hva som gjør et innovasjonspartnerskap suksessfullt for private bedrifter.

Intro til intervju

Introduksjon av oppgaven vår og mål for oppgaven

Info om personvern og behandling av data. Greit om det blir tatt opp?

Prosjektet er godkjent av NSD (Norsk senter for forskningsdata), all data vil bli håndtert i henhold til deres retningslinjer.

Info om struktur for intervju og ca hvor lang tid det vil ta

Stiller noen spørsmål, men h*n må gjerne utdype eller ta digresjoner underveis. I underkant av 1 time.

Spør om de har noen spørsmål til dette før vi starter.

Intro - om bedriften og intervjuobjektets rolle i bedriften

1. Vi vil gjerne vite mer om jobben din. hvor lenge har du jobbet i [selskapet]?
2. Hva er din stilling hos [selskapet]?
 - a. Hva er dine arbeidsoppgaver?
3. Hvorfor begynte du i [selskapet]?
4. Hva ønsker du å oppnå i din stilling hos [selskapet]?
 - a. Hva opplever du som et hinder(e) for å nå dette målet?
 - b. Hva opplever du som driver(e) for å nå dette målet?
5. Hva er viktig for dere som bedrift?
6. Hvordan vil du si at ledelsen i [selskapet] definerer suksess?
7. Hvordan jobber dere for å oppnå suksess?
8. Hva vil du si er deres største utfordring(er)?

9. Hvilke marked er det viktigste for dere?

Hoveddel

Offentlig leveranser

10. Hva er din erfaring med leveranser til offentlige aktører?

11. Hva mener du er de(n) største utfordringene knyttet til levering til offentlige aktører?

Innovasjonspartnerskap

12. Dere er/har vært en del av innovasjonspartnerskapet i Stavanger, hva synes dere om konseptet med innovasjonspartnerskap?

13. Hva er etter deres mening fordelene og ulempene med innovasjonspartnerskap som et rammeverk for offentlig innkjøp?

14. Hva fikk dere til å bli med i prosessen rundt innovasjonspartnerskapet i Stavanger?

a. Hva hadde dere som mål før prosessen startet?

b. Har dere hatt en spesiell strategi for å oppnå dette målet?

15. Hva er din mening om innovasjonspartnerskapet så langt?

a. Var dette dette dere hadde sett for dere?

b. Er dere fornøyd med status så langt?

c. Hva slags resultater har deltagelse i innovasjonspartnerskapet ført til for [selskapet]?

16. Er det noe du mener burde vært annerledes i prosessen/fasiliteringen rundt innovasjonspartnerskap?

17. Når man ser tilbake på prosessen hittil, ville dere gjort det igjen?

a. Hvorfor/hvorfor ikke?

18. Har dere lært noe av å være en del av innovasjonspartnerskapet?

19. Hva synes du om innovasjonspartnerskap sammenlignet med tidligere erfaringer du/dere har hatt med offentlige anskaffelser?

Aktører/partnere

20. Hva synes dere de offentlige aktørene har gjort bra i innovasjonspartnerskapet?

21. Er det noe dere har savnet fra de offentlige aktørene i prosjektet?

22. Hva er deres forhold til de andre involverte næringslivspartene i innovasjonspartnerskapet?

23. Opplever dere at alle involverte parter i innovasjonspartnerskapet har vært likeverdige partnere?

a. Hvorfor/hvorfor ikke?

24. Er det noe du kan se for deg at dere som selskap kunne gjort annerledes?
25. Hvordan har deres deltagelse i innovasjonspartnerskap påvirket eller ikke påvirket dere som et selskap?

Oslo prosjektet

26. Hva er deres forventninger til Oslo-prosjektet?
27. Hva ønsker dere å få ut av Oslo-prosjektet?
 - a. Nye kontrakter?
 - b. Nye samarbeidspartnere/kontakter?
 - c. Lærdom?

Strategiteori - Institusjoner

Innenfor strategi-litteratur kan institusjoner kan ses på som et sett med normer og sosial praksis som styrer samfunnet. Typiske eksempler på slike kan være lover, regler, skikker, normer og kultur.

28. Hvilke institusjoner/normer og sosial praksis føler du er mest tilstede i prosessen rundt et innovasjonspartnerskap? Hvorfor?
29. Opplevde du at noen institusjoner/normer og sosial praksis tilrettelegger for innovasjon for private bedrifter? I så fall, hvilke og hvordan?
30. Opplevde du at noen institusjoner/normer og sosial praksis er et hinder for innovasjon for private bedrifter? I så fall, hvilke og hvordan?

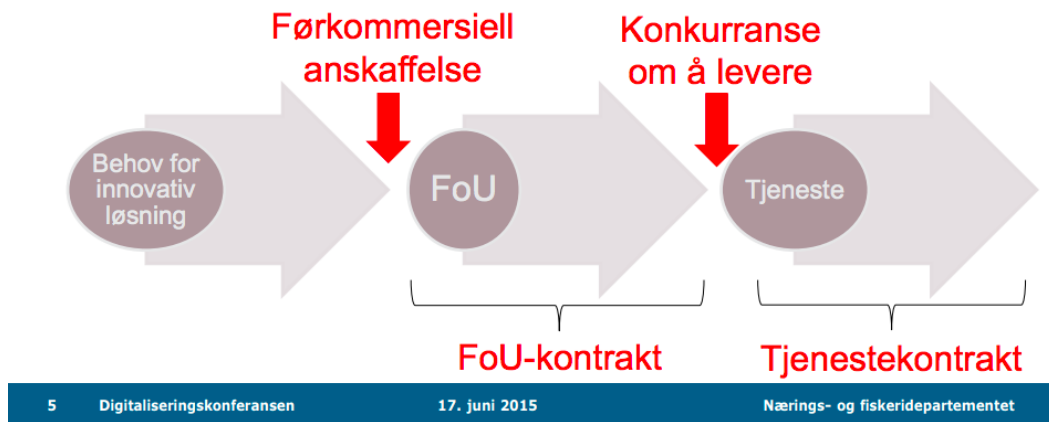
Avslutning

31. Basert på det vi har snakket om, hva har dere gjort bra/dårlig?
32. Basert på det vi har snakket om, er det noe mer du føler er relevant i lys av innovasjonspartnerskap?
33. Kan vi ta kontakt igjen dersom det dukker opp flere spørsmål?

Info om hvordan de kan få tak i oss.

Appendix 2 - Previous Innovative Procurement

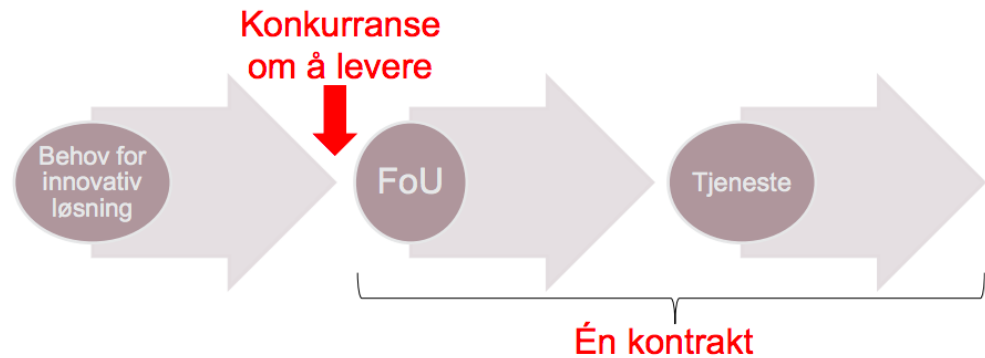
Alt. 1: Gamlemåten



Source: https://www.difi.no/sites/difino/files/carsten_eriksrud_ny.pdf

Appendix 3 - Innovation Procurement Partnership

Alt. 2: Innovasjonspartnerskap



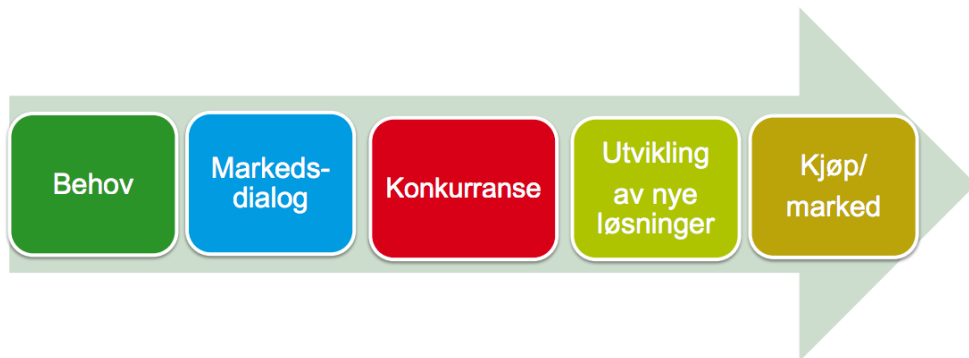
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Proessen



STAVANGER KOMMUNE

Source:

<https://www.ks.no/contentassets/9658e476fca34d0a8faf517b0288e9fe/et-innovasjonspartnerskap-s-tavanger-kommune070917.pdf>

Appendix 4 - Institutions

	Regulative institutions	Normative institutions	Cultural cognitive institutions
Public sector	<p>Procurement regulations</p> <p>Regulations for public administration</p> <p>Political agenda</p>	<p>Committee roles</p> <p>Project roles</p> <p>Communication with suppliers</p> <p>Communication with patients and next of kin</p> <p>Articulation of needs</p> <p>Fragmented structure</p> <p>Budget mentality</p>	<p>Scepticism towards private companies</p> <p>Risk averse</p> <p>Fear of wrongdoing</p> <p>Change happens slowly</p>
Private sector	<p>Accounting regulations</p> <p>Patent regulations</p> <p>Publicly funded subsidies</p> <p>CSR regulations</p>	<p>Entrepreneurs vs. corporations</p> <p>Organizational structure</p> <p>Working titles and responsibility roles</p> <p>CSR mentality</p> <p>Desire profit</p> <p>Bottom line mentality</p>	<p>Scepticism towards public sector</p> <p>Entrepreneurs tend to be risk willing</p> <p>Change happens fast</p>

Appendix 5 - Dictionary

Anbud = tender

Anbud (levert av potensiell supplier) = tender offer

Anbudskonkurranse = tender competition

Anskaffelsesprotokoll = procurement protocol

Anskaffelsesforskriften = procurement regulations

Behovsavklaring = need clarification

Behovsdrevet innovasjon = need-based innovation

Brukerdrevet innovasjon = user-driven innovation

Dokumentasjonsplikt = documentation requirements

Helseindustri = health care industry

Helsevesenet (privat + offentlig) = health care sector

Hjemmetjenester = home care services

Innovasjonspartnerskap = innovation procurement partnership

Offentlige anskaffelser = public procurement

Offentlig helsevesen = public health care sector

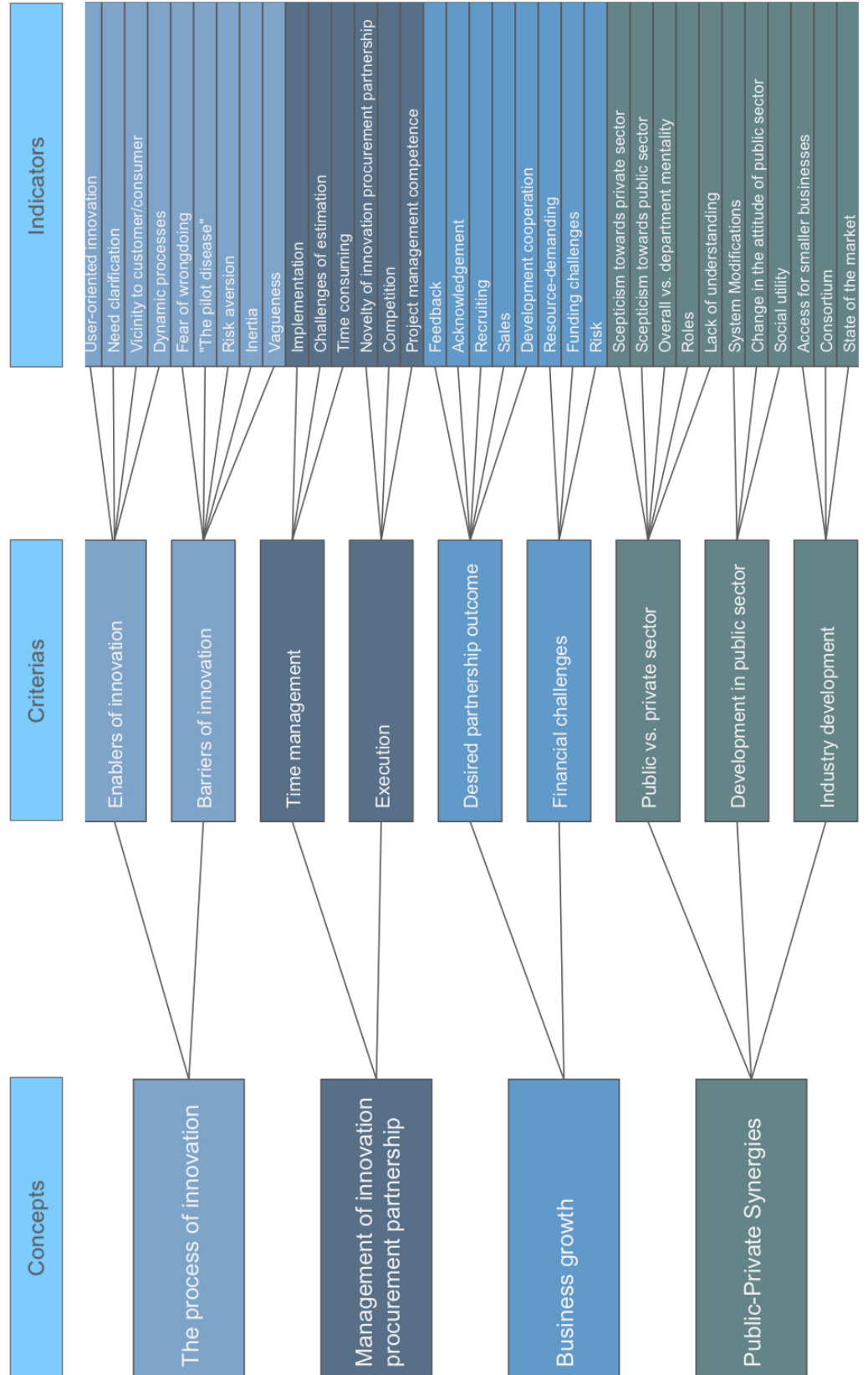
Oppdragsgiver = procuring organization

Privat helsevesen = private health care sector

Terskelverdier = value thresholds

Appendix 6 - Figure 4.4

Figure 4.4 (Larger view)



Appendix 7 - Preliminary Thesis

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Executive Summary

This paper is a Preliminary Master Thesis Report for MSc in Business at BI Norwegian Business School in Oslo, majoring in strategy. The proposed master thesis will focus on strategy for innovation in the Norwegian healthcare sector, focusing on the new concept of Innovation Procurement Partnership. Innovation Procurement partnership is a concept for cooperation between private and public sector, created as a result of new EU directives regarding procurement processes. The healthcare sector is chosen because it is of particular interest for the authors and currently the only ongoing Innovation Procurement Partnership exists in the healthcare sector. The research will explore the concept of Innovation Procurement Partnership through the theoretical lense of institution based view.

First, the topic of research will be introduced as well as research goals and a preliminary research question. This is followed by a presentation and discussion of core concepts relevant to the research. Litterature from institution based view will also be reviewed.

In addition, the preliminary thesis includes a rudimentary research design and choice of methods. A qualitative, inductive study is suggested, where the design is based on two case studies. The data collection will occur through interviews and relevant secondary data. Lastly, a timeline for the research is presented.

Introduction

“Innovation is the ability to see change as an opportunity - not a threat”

- *Steve Jobs*

Globalisation and technological advances provides new opportunities as well as new challenges. With the rapid development of technology, there are endless of possibilities to develop efficient solutions in order to handle social issues and new demands. One of these challenges are the changing demographics which increase the pressure on the healthcare sector. To overcome such challenges there is a need for new, innovative, and efficient solutions. One of the barriers to such innovation in the public sector is bureaucratic, rigid, and resource demanding public procurement processes (Uyarra et al., 2014; Edler & Georghiou, 2007). This barrier to innovation is especially evident in sectors such as the healthcare sector where the public sector normally are the first user of services (Uyarra et al., 2014).

As the public procurement accounts for a substantial part of many countries' GDP, it follows that this resource base can influence the drive for innovation (Uyarra et al., 2014; OECD 2011; European commission, 2014; Edler & Georghiou, 2007). Over the last years, the OECD average of public procurement in percentage of GDP has been stable around 11.9 percent (OECD, 2017). Historically, this percentage in Norway is above OECD average, and in 2016 Norwegian public procurement accounted for NOK 500 billions, 16 percent of GDP (SSB, 2017a). The EU has officially recognized the potential of public procurement as a driver for innovation and in 2014 new directives regarding public procurement was created. As a reaction to the new EU directives, the concept of Innovation Procurement Partnership was introduced in Norway (Europalov, 2017). This concept recognises the potential in public and private collaboration to create innovative solutions. The proposed master thesis will research Innovation Procurement Partnerships within the healthcare sector, with a theoretical base in the institution based view.

Research Question and Objectives

The preliminary research question of the master thesis is: *In the context of delivering innovative solutions to the Norwegian healthcare system, how can private suppliers obtain success in an Innovation Procurement Partnership?*

The goal of the research is to identify factors and elements that are necessary in order for a private supplier to see an Innovation Procurement Partnership as successful. In addition, the research wishes to look into how the private sector defines a successful Innovation Procurement Partnership. The research is specified to the Norwegian healthcare sector as it is found relevant with ongoing projects, in addition to being a complex and interesting sector. As Innovation Procurement Partnership is a newly developed form of cooperation between the public and private sector, the research in the proposed master thesis will be based on a case study of two ongoing Innovation Procurement Partnerships within the healthcare sector.

Based on the findings and previous literature, a substantive theory will be created. By creating a substantive theory on the matter of Innovation Procurement Partnership within the healthcare sector, the goal is to create a foundation future research can build on in order to create a more generalizable theory regarding the concept.

Core Concepts and Theoretical Foundation

This part of the preliminary master thesis presents core concepts, a review of public procurement in Norway and the development of Innovation Procurement Partnership. The theoretical foundation for the thesis, institution based view, is also reviewed.

Public Procurement and Innovation Procurement Partnership

What is Public Procurement?

Public sector encompass public administration, local municipality administration, and companies owned or controlled by the state or municipalities (Idsø, 2018). Procurement is an activity done with the purpose of covering a need for goods, services, or building and construction (Difi, 2017a). Public procurement is when the public sector procure goods or services (Edquist, 2015).

In order to secure fair processes surrounding procurements, tender competitions with several regulations are decreed by law. The traditional tender competitions to win the position as a supplier to the public consists of several steps. First and foremost the procuring organization (part of the public sector that demands a good or a service) need to create a tender by describing in detail what it wants to buy. Following this, every supplier that want to put in a tender offer is free to do so. Then the procuring organization needs to choose the best fit supplier for the job. If some of the rejected suppliers experience to be a better supplier there are possibilities for appeals of the process. Historically, a majority of procurers in the EU, use the criterion of lowest price as the only selection criteria (European Commission, 2017). This indicates too little attention given to factors such as quality, sustainability, and innovation.

In a situation where research and development are needed in the process of procurement, this adds another element to the process. Before the tender competition starts, a different procurement process is done for a research and development phase, with a different supplier (Appendix 1). The procuring organization is in some rare cases allowed to pick a supplier for the research and development phase without a tender process, but there is still limited freedom of dialogue during the innovative time period. This often leads to two suppliers, one for the research and development part, and another for the commercialization of the product. It is important to keep in mind that a procurement process does not

allow negotiations and it is illegal to change the tender during or after the procurement process (Difi, 2017b).

Legal Framework for Public Procurement

The statutory process for public procurement in Norway today are a result of regulations and agreements from several sources. The Norwegian Government is imposed to follow the EU laws and directives through the Norwegian EEA membership. It follows that the Norwegian laws are in accordance with the EU law for public procurement. In addition, Norway also has to comply with the WTO Government Procurement Agreement (WTO, 2018a). In general, the regulation promote fair competition, transparency, and prevent discrimination of international suppliers (WTO, 2018b; European Commission, 2018).

The practical implementation of laws and regulations in Norway has resulted in several ways to conduct a public procurement process in accordance with the law. The chosen procurement procedure depends on several aspects of the tender. Most defining is the nature and value of the tender. In Norway, there are three main value thresholds which are set by national and EEA law and regulations (Regjeringen, 2017a). For procurements above NOK 100,000 not including taxes, procuring organizations are required to keep procurement protocol and documentation requirements. If the procurement value is over NOK 1.1 million excluding taxes the procurement needs to be publicly announced. With some exceptions, the national threshold is similar to the EEA threshold with 1.1 million excluding taxes, and thus have to accommodate EEA regulations. Further, different regulations apply if the procurement regards health and social services or plan and design procurement (Difi, 2017c).

In order to become a supplier to the public sector, three demands need to be fulfilled, known as the documentation requirements and procurement protocol. The potential supplier needs to deliver a tax certificate and a HES-certificate (health, environment, and security certificate) (Regjeringen, 2017b). The procurement protocol includes a requirement to document essential conditions of the process of delivering the procurement (Regjeringen, 2017b). In addition to

these demands, the procurement organization can determine additional skill requirements for the supplier. The purpose of these additional requirements is to ensure that the supplier meets some minimum requirements for technical, organizational, economic, and financial capacity (Regjeringen, 2017b).

The Development of Innovation Procurement Partnership

Innovations can be seen as “new creations of economic or societal significance” and are a result of different actors in the market cooperating (Edquist, 2015, p. 3). In addition, the product or process needs to be implemented in order to qualify as an innovation. Innovation Procurement Partnership is a result of a much awaited policy change after recognizing the need for demand-side innovation in the public sector (European commission, 2014; OECD, 2011; Edquist et al., 2015).

Procurement regulations are criticised for only suiting a limited set of goods and services, and not being representative of all types of public procurement (Uyarra & Flanagan, 2010). Innovative products are one of the products that often fall outside the existing regulation of public procurement regulations. Such new products and services cannot be defined at the beginning of a procurement phase, or be developed, without a dialog between the procuring organization and the market. Literature suggests that public procurement should focus on the quality of governmental services, and make strategic decisions on a case by case basis that foster innovation (Uyarra & Flanagan, 2010). The structures behind the procurement regulations should foster cooperation between different actors of the bureaucracy.

Towards a Shift in the Procurement Policies

Traditional procurement systems have been fostering innovation from the supply side, as the public sector has made detailed tenders for procurement of already existing solutions, without the ability to negotiate. The solutions needed by the public sector does not necessarily exist as the supply side does not see the need and therefore don't develop suitable solutions. Over the last decades, policy debates have focused more on public demand as a driver of innovation (Uyarra & Flanagan, 2010; Uyarra et al., 2014; European commission, 2014; OECD 2011). Demand-side innovation policies are defined as “all public measures to induce innovations and/or speed up diffusion of innovations through increasing the

demand for innovations, defining new functional requirement for products and services or better articulating demand” (Edler & Georghiou, 2007, p. 952). This happens to fulfill the needs of the procuring organization when the goods or service does not exist in the market (Edquist et. al., 2015; Difi, 2017a).

In order to achieve efficiency and meet the demands of futuristic social challenges, innovation and rethinking of solutions are necessary. As public procurement accounts for nearly 20% of the GDP in Europe, there is a clear impact from public spending on the European competitiveness and the economy (European Commission, 2014). The ongoing public debates and pressure from member states have resulted in new EU directives for public procurement. These directives raise demands to environmental and socially sustainable procurements but also opens up for implementation of a new framework for innovation procurement. The new directives are a part of the EU’s “Europa 2020” strategy (Difi, 2015). Most member countries of the European Union are trying to move towards a holistic innovation policy, which can be defined as “a policy that integrates all public actions that influence or may influence innovation processes” (Edquist, 2015, p. 5).

In February 2014 the European Parliament replaced their directive on Public Procurement, initiating Public Procurement for Innovation (PPI) (Europalov, 2017). This was done in order to make the procurement processes easier and more flexible among other things, in order to support a smart, sustainable and inclusive growth. A PPI occurs when public procurers ask for something that can fulfill certain functions, and not for a specific object (Edquist, 2015). This in order to satisfy human needs, support agency needs or missions, and to solve societal problems. In addition, some innovation, either through a new process or product, are demanded in order for the process to be classified as a PPI.

Introduction of Innovation Procurement Partnership

The directive from EU was included in the Norwegian procurement regulations by law in June 2016 and utilized January 1st, 2017 (Europalov, 2017). Innovation Procurement Partnership is a result of these regulations, with a new approach to

include innovation in the Norwegian procurement process. In contrast to a PPI process, in an Innovation Procurement Partnership the procuring organization pledge to buy the finished product from the supplier, before the product is developed (European Commission, 2017; Norway Health Tech, 2017). In line with recent policy debates, Innovation Procurement Partnership arranges for innovation from the demand side and can be seen as a demand-side innovation policy.

Several steps are present in an Innovation Procurement Partnership, starting off with the procuring organization mapping the needs (Appendix 2). When the needs are mapped, the procuring organization will announce a tender competition in order to find one or several suppliers that can develop the product(s) or service(s) and commercialize it. It is important to keep in mind that in an Innovation Procurement Partnership the procuring organization commit to buy the product or service before it is invented (Norway Health Tech, 2017). This opens up for negotiations and a dialogue between the supplier(s) and the procuring organization when developing the product or service. As technology is developing and innovations become more advanced, a collaboration between several actors are necessary in order for innovation to occur (Edquist et. al., 2015; Uyarra et. al., 2014; Lu et al.,2008). This as tacit knowledge is crucial for learning, and only available through intensive interpersonal interactions (Lu et. al., 2008).

Advantages of Innovation Procurement Partnership

Public Perspective

Through Innovation Procurement Partnership, there is a large potential for the public sector, both in terms of efficiency gain and development. As it is established that the public sector can have a notable effect on innovation drive, several have concluded that state demand and state procurement, triggers more innovation in more areas than research and development subsidies (Geroski, 1990; Rothwell, 1984 referenced in Edler & Georghiou, 2007).Trough the new policies, the public sector enhances new possibilities for connecting demand and supply. In some sectors, such as healthcare, the public is often the first user of innovation, thus the lack of demand-side innovation is a strong barrier for suppliers to

innovate and fulfill the needs in an efficient matter (Uyarra et al., 2014). If Innovation Procurement Partnership is successfully carried out, the public sector should be better prepared to solve the challenges of the future, as products and services altered for the futuristic needs will be developed.

Private Perspective

For private funded companies, Innovation Procurement Partnership can increase the access to the public market for small and medium-sized companies. This as the focus will be on what a firm can deliver, and not if they are able to stand by through a challenging, bureaucratic process. An Innovation Procurement Partnership can also be seen as more tempting for small and medium sized firms, without large equity reserves, as the public are committed to buy the product before the cost of innovation is taken. As of today, 1.4 percent of public procurement is done with a dialog with the market (Innovative anskaffelser, 2017), indicating a low level of private impact on the procurements. If the access to the public market increase for the small and medium-sized businesses, it can lead to an increased revenue for the firms, which will make the companies grow and create more jobs.

Although small and medium-sized businesses account for the majority of the weight in the economy, they only win 45 percent of the value of public contracts above EU thresholds (European Commission, 2017). Research emphasizes the impaired competitive power of small and medium-sized businesses in relation to public procurement (NOU 1997:21, 1997). One of the reasons for this is the complicated procedures of the traditional procurement processes, with strict regulations and deadlines. According to research, some companies find these challenges to demanding and therefore deselect the public market. The regulations of the procurement processes give losing participants the offer to complain if the results are found to be unfair, but few companies use this opportunity in the fear of exclusion of future procurement processes (NOU 1997:21, 1997).

The Norwegian Healthcare Sector and Innovation

Defining The Norwegian Healthcare Sector

The proposed master thesis addresses innovations in the public sector, in the context of the Norwegian healthcare sector. For the purpose of this paper, the healthcare sector includes both the public and private healthcare. Public healthcare sector includes the services provided through the public welfare system, financed by the government. Private healthcare sector consists of all healthcare services available for private purchase. The healthcare industry consists of related industries; pharma, diagnostics, health ICT, MedTech and welfare tech (Jakobsen et al, 2016).

Norway has a well developed public healthcare sector as a part of the country's comprehensive welfare system. The Norwegian healthcare sector is ranked third by the European health consumer index (Directorate of Health, 2017), thus recognizing it as one of the best in the world. According to OECD, Norway ranks fourth amongst the OECD countries on healthcare spending per capita (OECD, 2016). In 2016 the total healthcare expenses in Norway were NOK 326 billion and accounted for 10.5 percent of GDP (SSB, 2017b). This amounts to an average healthcare expense of NOK 62,186 per inhabitant. In Norway, the healthcare expenses are mainly covered by the public. In 2013 the public covered 84 percent of the total healthcare spending, and this number has been stable since the mid 90's (Helse- og omsorgsdepartementet, 2014a).

The Norwegian public healthcare sector consists of two types of services; the primary healthcare services and the specialist healthcare services. The primary healthcare services are administered by the Norwegian municipalities and include health centers, after-hours care, and primary physicians. Hospitals, specialty physicians, and rehabilitation centers are included in the specialist healthcare services which are administered by the four regional authorities. Through both services, the Norwegian population had 4.3 doctor consultant per capita in 2015 (OECD, 2015). Despite high spending on health, an international study found that

a large percentage amongst the population is generally unsatisfied with the Norwegian public healthcare services, due to factors such as waiting time to see a specialist and coordination between institutions (Folkehelseinstituttet, 2016).

The Challenge of Increasing Demands

The general health of Norwegians is good, but the part of the population with higher education tend to have a slightly better health (SSB, 2017c). In regards to risk factors, such as smoking, obesity, and alcohol, Norway generally does well (Morgan et al., 2017). The average life expectancy is 84.2 years for women and 80.6 for men born in 2016. However, in parallel with an aging population, there is an increase in noncommunicable diseases. Today, 8 out of 10 Norwegians die from cancer, cardiovascular diseases, type II diabetes, or COPD (Innovasjon Norge, 2016). According to WHO, noncommunicable diseases account for 70 percent of the deaths on a global basis, and are increasing (WHO, 2017). Cardiovascular diseases, cancers, respiratory diseases, and diabetes account for over 80 percent of all premature deaths caused by noncommunicable diseases.

The part of the population aged 80 years and older, amounted to 40 percent of the users of the primary health services provided by the municipalities in 2016 (SSB, 2017d). Amongst this age group, 7 out of 10 use public home care services, but there are relatively large regional differences in the use of these services. In 2016 this segment accounted for only 4.2 percent of the Norwegian population (SSB, 2017e). It is expected that the corresponding number will be 11.7 percent of the population in 2100 (Folkehelseinstituttet, 2017).

The aging population brings several challenges into the healthcare sector. There will be fewer workers to take care of the elderly and sick people, and therefore fewer people that contribute to the welfare systems (WHO, 2016). The UN and EU point out these challenges and state that innovation and new ways to treat people are crucial in order to succeed in the healthcare sector of the future (Gjessing-Johnrud, 2016). If innovative solutions are not found, it is expected that every fourth employed Norwegian needs to work within the healthcare sector in a

few years (Jakobsen & Amundsen, 2016). Today, every tenth employed Norwegian works within the healthcare sector (Gjessing-Johnrud, 2016).

There are evident changes in the demand for healthcare services. A decreasing amount of people receive treatment in institutions, and simultaneously there is an increase in the home care service. Single rooms in institutions have increased, and so has the quality of the institution treatment. In addition to the increasing number of people receiving home care services there is an increase in how much help people receive at home (Borgan, 2012).

Innovation in the Norwegian Healthcare Sector

The Norwegian healthcare sector has been a victim of incremental development and change since laws and regulations regulating treatment were created during the 1960s. Over the last decade, a more aggressive approach has been present from the Norwegian Government in order to meet the challenges of increasing and changing demands for the healthcare service. In 2007, the Norwegian Government launched an initiative towards innovation within the healthcare sector, “Need-Based Innovation” (Damvad and Oslo Economics, 2011). Need-Based Innovation is a ten step guide to follow when innovating within the healthcare sector. The idea behind it was to use the knowledge from the users of the healthcare sector, as they are the best experts on their situation. This makes their information and insights important in an innovation process. The main concept of Need-Based Innovation regards actively using the information from the users when developing new products.

During the spring of 2013, the Ministry of Health and Care Services initiated “HelseOmsorg21 (HO21)” (Helse- og omsorgsdepartementet, 2014b). The goal of HO21 was to contribute to a knowledge based healthcare sector, recognized for high quality, patient safety, and efficient services. When Innovation Procurement Partnership was established by law in 2017, this was a concept used in the process of making it easier to achieve this goal.

The Complexity of the Norwegian Healthcare Sector

The complex composition of institutions and units that make up the Norwegian public healthcare sector are one of the challenges for innovation and implementation of innovation. An increased complexity of social tasks through history has led to organizing the work in different departments, units, and divisions on all levels (Gjessing-Johnrud, 2016). As new solutions require cooperation between the different actors, new challenges occur. Decisions and strategy need to occur on a higher level, but bureaucracy often slows the processes. Profits and costs fall on different actors, and the need to decide which budget to affect can be a challenge. A traditional conflict is a lack of cooperation between the primary health services and the specialist health services. In summary, cultural, economic, organizational, political, scientific, and technological factors challenge the efficiency of innovation within the healthcare sector (Gjessing-Johnrud, 2016). Another challenge with innovation within the healthcare sector is that the development time in the sector is long. This makes it an industry with high costs and large risks associated with innovation (Jakobsen & Amundsen, 2016).

There is a high conscious regarding this, and politicians have signaled desire to overcome these challenges (Gjessing-Johnrud, 2016). One important aspect in order to accomplish this is for the public sector to see the private sector as a collaborating partner instead of a competitor. In addition, the public sector needs to recognize innovation as a tool to do more with the same or smaller amount of money. These aspects go hand in hand and are important as private corporations stand free to use new technology and have larger economic incentives, while the public sector has the power to commercialize a product (Gjessing-Johnrud, 2016).

Funding of Research and Development in the Healthcare Sector

In Norway, medical and health related research and development are mainly publicly financed (Forskningsrådet, 2014). Looking towards the world, Norway has the second largest public investments in research and development related to health. Taking the private numbers into account and looking at total investments related to research and development within health, Norway ranks 20th, as many

countries have a large portion of privately funded research and development (Forskningsrådet, 2014). InnoMed is a national network established by the Ministry of Health and Care Services, to share competence of Need-Based Innovation in the healthcare sector and focus on value creation within the healthcare sector for patients and the society (InnoMed et. al., 2017). Studies emphasize the potential of cost savings for the society if people do not get sick, or if people get older before getting sick (Gjessing-Johnrud, 2016). As an example, a treatment that delay development of dementia with five years would relieve the British healthcare with 566,000 full-time equivalents and reduce their treatment expenses with 21 billion British Pounds. If the progression of Parkinson disease was reduced by 20 percent, the German healthcare would save 4 billion Euro until 2040 (Gjessing-Johnrud, 2016).

Considering these challenges and opportunities, the long-term plan for the Norwegian Government's research and development program put importance on the need to work towards the society's challenges and emphasize healthcare (Gjessing-Johnrud, 2016). A large potential market is found around the globe, as every person on the planet demands good health. In addition, it is expected that the next generation of elders will have a better economic foundation to take care of their own living- and caring needs than earlier generations (Gjessing-Johnrud, 2016).

The Institution Based View

Several of the challenges within the public procurement process and the Norwegian healthcare sector are related to different institutions. The Institutional based view in the strategic field is based upon the concept that decisions and actions are influenced by institutions. Institutions can differentiate, and there are several types of institutions. Scott (2001) suggest three pillars of institutions in regards to strategy; regulative, normative, and cultural-cognitive. Regulative institutions can be laws, rules, and sanctions, where legal sanctions await if it is broken. Normative institutions are morally governed and could, for instance, be certifications or accreditations, typically what are recognized as norms. Cultural-cognitive institutions are harder to recognize, as it is based on shared

understandings within a culture or institutions that are taken for granted, typically recognized as the shared logic of actions. If cultural-cognitive institutions are broken, others might find the actions to be strange, but no legal actions will follow.

Researchers within the field of strategy have since the 1990s argued that formal and informal institutions affect strategic decisions within an organization (Powell and DiMaggio, 2012). Peng (2002, p. 253) define the institution based view as “an institution-based view on business strategy (...) focuses on the dynamic interaction between institutions and organizations, and considers strategic choices as the outcome of such an interaction”.

Looking towards the fundamental questions of strategy, the institution based view differ from other strategic views (Peng et. al., 2009). According to the institution based view, a firm differs from another due to informal relationships. The network of a firm gives them advantages or disadvantages. When explaining the behavior of organizations Peng et. al. (2009) argue that it is a result of formal and informal rules of the game. When determining the scope of the firm, the institution based view find formal and informal aspects of the surrounding institutional environment essential. Moving forward, it is important to develop the firm to suit the future, hence the institutional environment form the scope of the firm. In order to address the failure or success of a firm over time, it is important to look at institutional forces. Businesses who understand the rule of the game succeed, while those who do not, fail.

When looking at Innovation Procurement Partnership, several institutions are challenged, from all of Scott's (2001) pillars. The changed laws and regulations address the regulative institutions, where new ways of doing things relate to the normative and cognitive pillars of institutions. Lu et. al., (2008) suggest that institutional environment influences innovation strategies in three different ways; rules of legitimacy, the source of knowledge, and the allocation of resources and incentives for innovation.

Rudimentary Research Design and Choice of Methods

Qualitative

The research project will be conducted with a qualitative approach. Denzin and Lincoln (2011, p. 3) define qualitative research as “a situated activity that locates the observer in the world. (...) This means that qualitative research study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them.” Typically qualitative research is associated with words instead of numbers, as it “offer insight into complex social processes that quantitative data cannot easily reveal” (Eisenhardt & Graebner, 2007, p. 26). Qualitative research opens for a flexible and open design (Corbin, Strauss, & Strauss, 2014).

Looking into the epistemology of qualitative studies, naturalism and constructionism are the most common concepts, as researchers often ask “What is going on here?” (Silverman, 2013, p. 103). Naturalism focus on how things are experienced and are typically related to “what” questions. Constructivism focus on how things are socially brought into being, or in other words, how humans understand their experiences.

Inductive

As qualitative research is about viewing the world from a perspective it often contribute to empirical knowledge. To carefully analyze raw data in order to develop themes, theories, or models, is known as an inductive approach (Thomas, 2006). When an inductive approach is used in qualitative research, it is known as grounded theory (Research Methodology, 2018). Strauss and Corbin (1998, p. 12), describes grounded theory in this manner; “the researcher begins with an area of study and allows the theory to emerge from the data”. Grounded theory is used as it is believed to offer an insight into the real world, since it is not build up from different theories that are brought together through speculation (Strauss & Corbin,

1998). With the newness of Innovation Procurement Partnership in Norway, there is a lack of related research. Using an inductive research approach therefore seems fit, with a goal of developing substantive theory related to the area of study. A substantive theory is a theory that is transferable but not necessarily generalizable (Strauss & Corbin, 1998).

Case Study

Case study will be the research design for the master thesis, as the purpose is to explore the new phenomena of innovation in the public sector through Innovation Procurement Partnerships. Case studies are “rich, empirical descriptions of particular instances of a phenomenon that are typically based on a variety of data sources” (Yin, 1994, referenced in Eisenhardt & Graebner, 2007, p.25). As the concept of Innovation Procurement Partnership in practice is very new, there is limited knowledge and lack of previous empirical research on the phenomena in Norway.

A case is to be studied in detail to develop as much understanding as possible (Silverman, 2013). Cases are not representable for a whole population but can provide insight and knowledge that can lead to the development of new theory (Eisenhardt & Graebner, 2007), which is the aim of this study. The research strategy of building theory from case studies involves the use of at least one case “to create theoretical constructs, propositions and/or midrange theory from case-based, empirical evidence” (Eisenhardt & Graebner, 2007, p. 25).

With such a new concept as the phenomena in question, it follows that there are limited cases to choose from. Today there are two instances of Innovation Procurement Partnerships in Norway: a stroke rehabilitation project in Oslo and a project in Stavanger related to the life quality of patients (C3, 2018a; Stavanger Region European Office, 2017). Both of these cases will be the subjects for this research project. The purpose of including two cases of the same phenomenon is to get more information and increased empirical variation. Due to availability and access, the Oslo project will be the main case, which is a typical selection method for qualitative case studies (Silverman, 2013). The timeline of the project in Oslo

is also compatible with the one of the research project, in the sense that they are both starting up at the same time.

The Cases

Oslo Project

As a contribution to solving the future challenges within the healthcare sector, the Centre for Connected Care (C3) was started in 2015 (C3, 2016). C3 is a collaboration between 17 partners including hospitals, municipalities, research institutions, and the actors within the healthcare industry, funded by the Norwegian National Research Council (C3, 2018a). C3's vision is "to catalyze the adoption and diffusion of future healthcare with patients being in charge of their own health" (C3, 2018b, p. 3). Included in the core activities are development and testing of new solutions in collaboration with the healthcare sector. The objective of C3 is "To accelerate adoption and diffusion of patient-centric innovations that change patient pathways and delivery systems, empower the users and increases growth in the healthcare industry" (C3, 2018b, p. 4).

One of C3's recent projects is an Innovation Procurement Partnership in collaboration with Oslo municipality and Sunnaas Hospital. The project was approved during the late 2017, scheduled to start up in the beginning of 2018. The aim of the project is to find innovative solutions for the rehabilitation process of stroke patients, named "Et SLAG for fremtidens helsetjeneste", in this paper recognized as, "the Oslo project". When working towards this, the Innovation Procurement Partnership has two formulated goals. The primary goal is to develop a service concept which can save one bed day for each stroke patient per year. Second, the project aims to find a solution that shows potential in regards to other chronic challenges with the same complexity (C3 et al., 2017).

Every year about 12,000 people within the Norwegian society get hit by a stroke. Estimates suggest that this costs the society between NOK 7 and 8 billion (C3 et al., 2017). Due to an aging population, estimates show that the number of people hit by stroke will increase by almost 50 percent over the next 20 years (C3, 2017).

After a stroke, $\frac{1}{3}$ are discharged to go home, $\frac{1}{3}$ receive rehabilitation from the municipality or specialist healthcare service, and $\frac{1}{3}$ are transferred to nursing. Lack of rehabilitation spots is a large bottleneck for the treatment of strokes today. The differences of those who receive early rehabilitation by hospitals vary with 17-46 percent on regional levels and there are large differences within the follow-up service of patients (C3 et al., 2017). Due to long waiting periods for specialized treatment (specialist healthcare services), there is a demand for basic rehabilitation in the municipalities (primary healthcare services). If the project succeeds and one is able to save one bed day for each stroke patient every year, a conservative estimate shows a saving of NOK 120 millions a year.

Stavanger Project

This was the first Innovation Procurement Partnership in Norway, started in 2016. The Stavanger Project aims to increase life quality for full-time patients under municipality care, by making them more active and living more independently (Stavanger Region European Office, 2017). Workshops were held during the winter of 2017 in order to identify the needs and challenges to solve the project. The goal of the project is to be finished and start the procurement process by January 2020 (Difi, 2017d).

A Plan for Data Collection

Interviews and secondary data will be used in the process of data collection for the research project.

Qualitative interviews look for knowledge expressed through words, as the goal is to receive an understanding of the interviewee's view of the world (Kvale & Brinkmann, 2015). For the purpose of the research project, a semi-structured interview seems to be most suitable. Semi-structured interviews have a relatively detailed interview-guide but are open to follow-up questions and digressions throughout the interview (McIntosh & Morse, 2015). This allows a leeway for angles important for the interviewee, simultaneously as the interviewer can focus the interview on questions related to the research (Brinkmann, 2014). Through the

interview process of this research project, the stages presented by Kvale & Brinkmann (2015) will be followed (Appendix 3).

Secondary data can be anything that is not conducted for the research project, such as documents, photographs, and ethnographic accounts, among others (Smith & Smith, 2008). The common feature for secondary data is that the documentation is not conducted for the purpose of the research, but rather works as a further analysis of already existing data to enrich the research. Secondary data can also offer cost and effort advantages (Cowton, 1998).

For the purpose of the research project, estimation indicates that 8-12 interviews will be conducted. Some of the interviews conducted will be conducted of people working for and related to the Stavanger-project. The goal is to interview at least one of the people facilitating the process there, as the Stavanger project is more developed than the Oslo project. In addition interviews with the chosen supplier and a supplier that was not chosen are desired. Related to the Oslo-project, interviews are desired from C3, Oslo municipality, Sunnaas hospital, and potential suppliers. In regards to secondary data, financial statements, statistics from the healthcare sector, project documents, and procurement documentation are some of the data that will be considered.

In line with Strauss & Corbin's (1998) description of grounded theory, the data will be systematically gathered and analyzed throughout the process. This in order to support a close relationship between data collection, analysis, and eventual theory.

Timeline for the Thesis Project

A temporary timeline for this thesis project can be found in Appendix 4. After handing in this preliminary, the theory building will continue, and the data collection begin. The first interview is scheduled with C3 on September 17th, 2018, which will be an interview to get their perspective on the process of developing an Innovation Procurement Partnership. After this, a more specific interview guide will be prepared, before interviewing others. As soon as the data

collection phase begins, the analysis of data will occur. One of the milestones is to finish the data collection in April, in order to start writing the thesis during the spring. The overall goal of the master thesis is to finish and deliver by July 1st, 2018. This plan is open for change as the final deadline for the master thesis is September 1st, 2018.

References

- Borgan, J. K. (2012). Pleie- og omsorgsstatistikk 1962-2010. *Statistics Norway*. Retrieved from:
https://www.ssb.no/a/publikasjoner/pdf/rapp_201210/rapp_201210.pdf
- Brinkmann, S. (2014). *Qualitative Interviewing*. Oxford: Oxford University Press. Retrieved from <https://ebookcentral-proquest-com.ezproxy.library.bi.no>
- C3. (2016). *Annual report 2015*. Retrieved from:
<https://www.c3connectedcare.org/loadFile.php?fileid=43f0b15d-d90e-4edf-8844-bc175c6c3d80>
- C3. (2017). *Et SLAG for fremtidens helsetjeneste* [Internal project document].
- C3. (2018a). About C3. Retrieved from:
https://www.c3connectedcare.org/about_c3.html
- C3. (2018b). *Annual report 2016*. Retrieved from:
<https://www.c3connectedcare.org/loadFile.php?fileid=1f372d51-8a36-4bcc-bbb8-3e896a7138aa>
- C3, Oslo Kommune & Sunnaas Sykehus. (2017). *Arbeidsdokument forberedelser til SLAG prosjekt* [PowerPoint presentasjon, internal project document]
- Corbin, J., Strauss, A., & Strauss, A. L. (2014). *Basics of qualitative research*. Sage.
- Cowton, C. J. (1998). The use of secondary data in business ethics research. *Journal of Business Ethics*, 17(4), 423-434.
- Damvad & Oslo Economics. (2011). Behovsdrevet innovasjon og næringsutvikling i helsesektoren. Retrieved from:
<https://beta.legeforeningen.no/contentassets/a6de4117757a49c7ba1895134c739849/innovasjon-evaluering-rapport.pdf>
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research*. Sage.
- Difi. (2015). Innovasjonspartnerskap – ny kontraktsform/prosedyre i nytt regelverk om offentlige anskaffelser [Movie]. Retrieved from:
<https://vimeo.com/131096435>
- Difi. (2017a). Anskaffelsesordbok. Retrieved from:
<https://www.anskaffelser.no/gjore-anskaffelser/anskaffelsesfaglige-temaer/anskaffelsesordbok>

- Difi. (2017b). Regelverk for offentlige anskaffelser. Retrieved from: <https://www.anskaffelser.no/gjore-anskaffelser/anskaffelsesfaglige-temaer/regelverk>
- Difi. (2017c). Anskaffelser under 1,1 mill. kroner. Retrieved from: <https://www.regjeringen.no/no/tema/naringsliv/konkurransopolitikk/offentlige-anskaffelser-/andre-kolonne/terskelverdier/id2522847/>
- Difi. (2017d). Innovasjonspartnerskap hos Stavanger kommune. Retrieved from: <https://www.anskaffelser.no/verktoy/innovasjonspartnerskap-hos-stavanger-kommune>
- Directorate of Health. (2017). Nøkkeltall: Norge i et internasjonalt perspektiv. Retrieved from: <https://helsedirektoratet.no/statistikk-og-analyse/nokkeltall/nokkeltall-norge-i-et-internasjonalt-perspektiv>
- Edler, J., & Georghiou, L. (2007). Public procurement and innovation—Resurrecting the demand side. *Research policy*, 36(7), 949-963.
- Edquist, C., Vonortas, N. S., Zabala-Iturriagoitia, J. M., & Edler, J. (Eds.). (2015). *Public procurement for innovation*. Edward Elgar Publishing.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of management journal*, 50(1), 2532.
- Europalov. (2017). Innkjøpsdirektivet (revisjon). Retrieved from: <http://www.europalov.no/rettsakt/innkjopsdirektivet-revisjon/id-5217>
- European Commission. (2014). *Public Procurement as a Driver of Innovation in SMEs and Public Services*. Belgium: European Union
- European Commission. (2017). *Public procurement strategy*. Retrieved from: http://ec.europa.eu/growth/single-market/public-procurement/strategy_en
- European Commission. (2018). Public Procurement. Retrieved from: https://ec.europa.eu/growth/single-market/public-procurement_en
- Folkehelseinstituttet. (2016). *Commonwealth Funds undersøkelse av helsetjenestesystemet i elleve land: Norske resultater i 2016 og utvikling over tid*. Retrieved from: <https://www.fhi.no/globalassets/dokumenterfiler/rapporter/commonwealth-funds-undersokelse-av-helsetjenestesystemet-i-elleve-land.pdf>
- Folkehelseinstituttet. (2017). Andelen personer over 65 år i befolkningen. Retrieved from: <https://www.fhi.no/hn/eldre/andelen-personer-over-65-ar-i-befol>
- Forskningsrådet. (2014). HelseOmsorg21. Retrieved from: https://www.regjeringen.no/contentassets/8ab2fd5c4c7746dfb51e3f64cd4d71aa/helseomsorg21_strategi_web.pdf?id=2266705

- Gjessing-Johnrud, J. B. (2016). Drømmeløftet 2016: Helse og velferd. *Innovation Norway*. Retrieved from:
<http://www.xn--drmmelftet-1cbe.no/wp-content/uploads/2016/08/Helseogvelferd.pdf>
- Helse- og omsorgsdepartementet. (2014a). *HelseOmsorg21 - Et kunnskapssystem for bedre folkehelse*. Retrieved from:
https://www.regjeringen.no/contentassets/8ab2fd5c4c7746dfb51e3f64cd4d71aa/helseomsorg21_strategi_web.pdf?id=2266705
- Helse- og omsorgsdepartementet. (2014b). HelseOmsorg21. Retrieved from:
<https://www.regjeringen.no/no/dokumenter/HelseOmsorg21/id764389/>
- Idsø, J. (2018). Offentlig sektor. *Store norske leksikon*. Retrieved from:
https://snl.no/offentlig_sektor
- InnoMed, Helsedirektoratet, Helse Midt-Norge, SINTEF. (2017). Behovsdrevet Innovasjon. Retrieved from:
http://innomed.no/uploads/10_steg_til_innovasjon_i_helsesektoren_1.pdf
- Innovasjon Norge. (2016). *Drømmeløftet 2016: Helse og velferd*. Retrieved from:
<http://www.xn--drmmelftet-1cbe.no/wp-content/uploads/2016/08/Helseogvelferd.pdf>
- Innovative anskaffelser. (2017). Resultater. Retrieved from:
<http://innovativeanskaffelser.no/resultater/>
- Jakobsen, S. E., Amundsen, B. (2016). Innovasjon i helsesektoren. *Forskningsrådet*. Retrieved from:
https://www.forskningsradet.no/no/Nyheter/Innovasjon_i_helsesektoren/1253969755202
- Jakobsen, E. W., Nellesmann, R. G., Skogli, E. og Theie, M. G.(2016). *Verdiskaping i Helsenæringen* (Menon Publication 27/2016). Retrieved from:
<http://www.menon.no/wp-content/uploads/2016-27-Verdiskaping-i-helsen%C3%A6ringen.pdf>
- Kvale, S. & Brinkmann, S. (2015). *Det Kvalitative Forskningsintervju* (3rd ed). Oslo: Gyldendal
- Lu, Y., Tsang, E. W., & Peng, M. W. (2008). Knowledge management and innovation strategy in the Asia Pacific: Toward an institution-based view.
- McIntosh, M. J., & Morse, J. M. (2015). Situating and constructing diversity in semi-structured interviews. *Global qualitative nursing research*, 2, 2333393615597674.
- Morgan, D., Gmeinder, M. and Wilkens, J. (2017). *An OECD Analysis of Health Spending in Norway. OECD Health Working Papers, No. 19*. Retrieved from:
[http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DELSA%2FHEA%2FWD%2FHWP\(2017\)1&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DELSA%2FHEA%2FWD%2FHWP(2017)1&docLanguage=En)

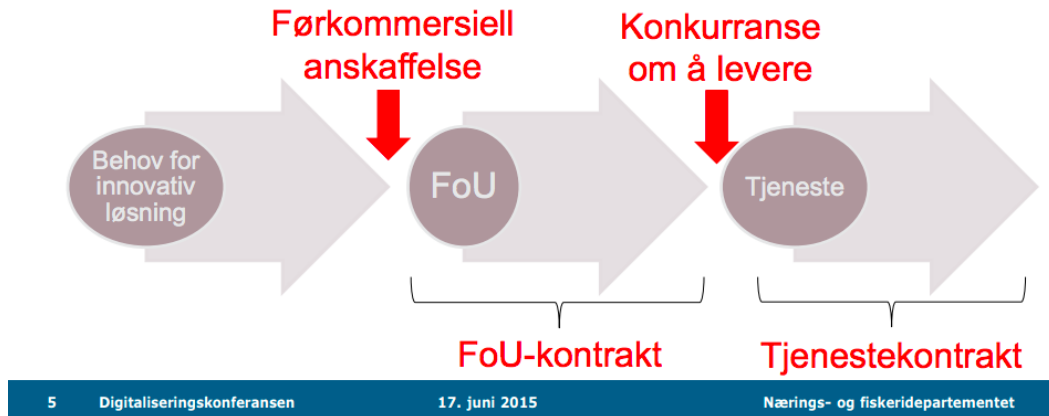
- Norway Health Tech. (2017). "Skulle ønske jeg hadde" – Metode for bruker og behovsdrevet innovasjon i helse. Retrieved from: <https://ushtakerhus.files.wordpress.com/2017/11/4-skulle-c3b8nske-jeg-hadde-me-todikken.pdf>
- NOU 1997:21. (1997). *Offentlige anskaffelse*. Retrieved from: <https://www.regjeringen.no/no/dokumenter/nou-1997-21/id141007/>
- OECD. (2011). *Demand-side Innovation Policies*, OECD Publishing. <http://dx.doi.org/10.1787/9789264098886-en>
- OECD. (2015). Doctor consultations. Retrieved from: <https://data.oecd.org/healthcare/doctors-consultations.htm>
- OECD. (2016). Health Spending. Retrieved from: <https://data.oecd.org/healthres/health-spending.htm>
- OECD. (2017). *Government at a Glance 2017*. Paris: OECD Publishing Retrieved from: http://dx.doi.org/10.1787/gov_glance-2017-en
- Peng, M. W. (2002). Towards an institution-based view of business strategy. *Asia Pacific Journal of Management*, 19(2-3), 251-267.
- Peng, M. W., Sun, S. L., Pinkham, B., & Chen, H. (2009). The institution-based view as a third leg for a strategy tripod. *The Academy of Management Perspectives*, 23(3), 63-81.
- Powell, W. W., & DiMaggio, P. J. (Eds.). (2012). *The new institutionalism in organizational analysis*. University of Chicago Press.
- Regjeringen. (2017a). Terskelverdier. Retrieved from: <https://www.regjeringen.no/no/tema/naringsliv/konkurransopolitikk/offentlige-anskaffelser-/andre-kolonne/terskelverdier/id2522847/>
- Regjeringen. (2017b). Dokumentasjonsplikten og anskaffelsesprotokoll. Retrieved from: <https://www.regjeringen.no/no/tema/naringsliv/konkurransopolitikk/offentlige-anskaffelser-/andre-kolonne/dokumentasjonsplikten-og-anskaffelsesprotokoll/id2539133/>
- Research Methodology. (2018). Inductive Approach (Inductive Reasoning). Retrieved from: <https://research-methodology.net/research-methodology/research-approach/inductive-approach-2/>
- Scott, R.W. (2001). Institutions and organizations. *Thousand Oakes, CA: Sage Publications Inc*. Chapters 2 and 3.
- Silverman, D. (2013). *Doing qualitative research: A practical handbook*. SAGE Publications Limited.

- Smith, E., & Smith Jr, J. (2008). *Using secondary data in educational and social research*. McGraw-Hill Education (UK).
- SSB. (2017a). Offentlige innkjøp. Retrieved from: <https://www.ssb.no/offinnkj>
- SSB. (2017b). Helseregnskap. Retrieved from: <https://www.ssb.no/nasjonalregnskap-og-konjunkturer/statistikker/helsesat>
- SSB. (2017c). Fakta om helse. Retrieved from: <https://www.ssb.no/helse/faktaside/helse>
- SSB. (2017d). Betydelige forskjeller i bruk av kommunale omsorgstjenester blant eldre. Retrieved from: <https://www.ssb.no/helse/artikler-og-publikasjoner/betydelige-forskjeller-i-bruk-av-kommunale-omsorgstjenester-blant-eldre>
- SSB. (2017e). Nøkkeltall for befolkning. Retrieved from: <https://www.ssb.no/befolkning/nokkeltall/befolkning>
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research techniques*. Sage publications.
- Stavanger Region European Office. (2017). STAVANGER KOMMUNE INNGÅR NORGES FØRSTE INNOVASJONSPARTNERSKAP. Retrieved from: <https://stavangerregion.no/2017/02/28/stavanger-kommune-inngar-norges-forste-innovasjonspartnerskap/>
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American journal of evaluation*, 27(2), 237-246.
- Uyarra, E., Edler, J., Garcia-Estevez, J., Georghiou, L., & Yeow, J. (2014). Barriers to innovation through public procurement: A supplier perspective. *Technovation*, 34(10), 631-645.
- Uyarra, E., & Flanagan, K. (2010). Understanding the innovation impacts of public procurement. *European Planning Studies*, 18(1), 123-143.
- WHO. (2016). *World Health Statistics 2016: Monitoring health for the SDGs*. retrieved from: http://www.who.int/gho/publications/world_health_statistics/2016/en/
- WHO. (2017). Noncommunicable diseases. Retrieved from: <http://www.who.int/mediacentre/factsheets/fs355/en/>
- WTO. (2018a). Parties, observers and accessions. Retrieved from: https://www.wto.org/english/tratop_e/gproc_e/memobs_e.htm
- WTO. (2018b). Text of the Agreement. Retrieved from: https://www.wto.org/english/tratop_e/gproc_e/gpa_1994_e.htm

Appendix

Appendix 1

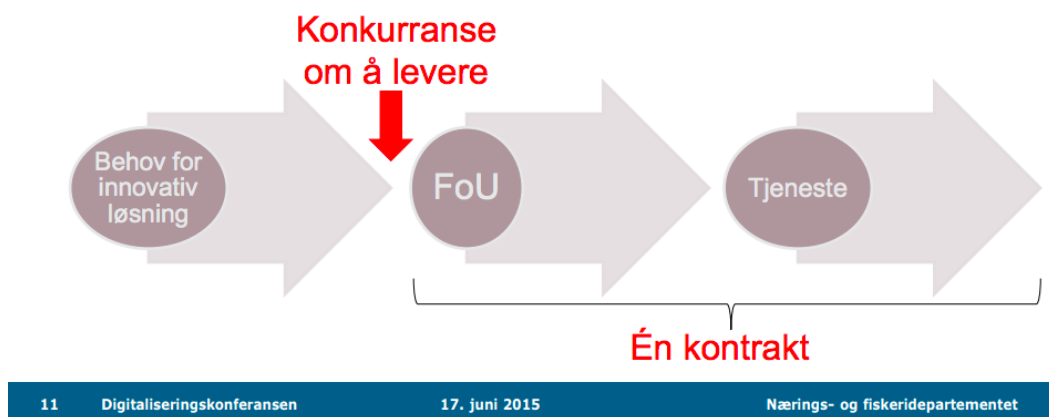
Alt. 1: Gamlemåten



Source: https://www.difi.no/sites/difino/files/carsten_eriksrud_ny.pdf

Appendix 2

Alt. 2: Innovasjonspartnerskap



Source: https://www.difi.no/sites/difino/files/carsten_eriksrud_ny.pdf

Appendix 3

Stages of an Interview Process by Kvale & Brinkmann (2015)

- 1. Thematize:** Formulate purpose, describe how the theme is perceived.
- 2. Planning:** Plan and take into account all seven stages. Plan with the purpose of obtaining the knowledge demanded and with regards to the moral implications of the study.
- 3. Interviews:** Execute the interviews on the basis of an interview guide, with a reflected approach towards the knowledge demanded and the context of the interview. In addition, take into account the human relations of the interview situation.
- 4. Transcribe:** Prepare the interview material for analysis, which usually causes transcription from talk to writing.
- 5. Analyse:** With a background in the purpose of the research, and the nature of the interview material, decide which method of analysis that appears to be the best fit.
- 6. Verification:** Look into the generalizability, reliability, and validity of the findings from the interviews. Reliability refers to the trustworthiness of the results, while the validity refers to the ability of the results to examine what it is meant to examine.
- 7. Reporting:** The findings and method are communicated through suited documentation, in line with scientific standards that regards the ethics of the research and ends up with a readable product.

Appendix 4

