Communication – the road to innovation

A qualitative case study of a municipality’s use of social media for innovation

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Abstract

Social media for innovation have been used by organizations all over the world to involve users in the innovation process. However, it has not been studied to a great extent within the public sector. The public sector context is different from other organization and focus on innovation to improve citizens’ service. This study aims to investigate how the public sector uses social media for innovation purposes, by conducting semi-structured interviews with employees at a municipality. The study showed that the public sectors adoptions of social media in their innovation process are sporadically applied. It showed that they do involve users in innovation, but mainly through face-to-face meetings. Communication is the common denominator in both the innovation procedures and the social media usage within the public sector. In conclusion, communication can be the road to innovation for the public sector.

Key words: Innovation, open innovation, social innovation, innovation process, social media, communication, municipality, public sector

1. Introduction

Innovation has for a long time been appealing to organizations, due to its ability to increase competitive advantages (Kankanhalli, Zuiderwijk & Tayi, 2017; Crossan & Apaydin, 2010; Tidd & Bessant, 2013). This also includes the public sector that has gain interest in open innovation to better handle the big changes in society (Bommert, 2010; Mergel, 2015). Open innovation encourages organization open up and search for valuable ideas and solutions outside the organization (Bommert, 2010; Mergel & Desouza, 2013), for example users and citizens. The government of Sweden has realized the importance of open innovation in the public sector and has included it in the Swedish innovation strategy. It concludes that the use of open innovation within the public sector are necessary and that the public sector need to contribute to the innovation demand in Sweden. This includes having the capabilities, methods and procedures to handle new solutions and changes. One of the most important elements of this strategy is to involve people and get the wisdom of the crowd (Government office of Sweden, 2012).

"When people meet, ideas, knowledge and expertise from different sources and areas are pitted against each other, resulting in renewal. To utilize the capacity and power of initiative of the entire population is therefore the starting point for a powerful innovation strategy” (Government office of Sweden, 2012, 21).

User involved innovation such as open innovation have increased the interest in using social media for innovation purposes. This is because social media possess qualities that may be useful for innovation. Such as, efficiency, cheapness
(Gallaugher & Ransbotham, 2010; Kaplan & Haenlein, 2010) and the ability to provide a direct contact with a broad reach of users without geographical boundaries (Bekkers, Tummers & Voorberg, 2013).

Both innovation and social media have been well investigated and it exist lots of research within both research areas. This includes research within the context of the public sector. There is research on open innovation in the public sector (Lee, Hwang & Choi, 2012; Mergel, 2015; Mergel & Desouza, 2013) and on usage of social media in the public sector (Bertot, Jaeger & Hansen, 2012; Bonsón, Torres, Royo & Flores, 2012; Mergel, 2013). However, it exist very little research on social media usage for innovation within the public sector. This has been neglected in previous research that have mainly studied other types of organizations. There exist little information on how social media can be used throughout the innovation process and most research also investigates this in other organizations than the public sector. This has created a gap in existing research within the research area of innovation and social media. This study aim to contribute and decrease this research gap.

The purpose of this study is to gain knowledge about how the public sector uses social media to innovate, this by investigating and describing the municipality’s innovation procedures and how they use social media. The research question for this study is: "How do the public sector use social media in their innovation process?" The study is a qualitative case study and the object of this study is a medium-sized municipality in northern Sweden. To be able to answer the research question I conducted semi-structured interviews with the employees at the municipality.

2. Literature review

This study is concerned with: innovation and social media. The literature review will contain research in these areas with a specific focus on the public sector and government context. Within innovation will open innovation, crowdsourcing and social innovation be given special attention. Within social media will communication be a central part. I will end the literature review with existing research on how to combine innovation and social media.

2.1 Innovation

There is no clear definition of innovation. Since it is used within different research areas multiple definitions exist with focus from that particular area (Crossan & Apaydin, 2010). Some definitions are presented below:

"... innovation is a process of turning opportunity into new ideas and of putting these into widely used practice." (Tidd & Bessant, 2013, p.19)

"an intentional and proactive process that involves the generation and practical adoption and spread of new and creative ideas, which
aim to produce a qualitative change in a specific context” (Sørensen & Torfing, 2011, 849)

Creativity, knowledge, or change is often associated with innovation (Crossan & Apaydin, 2010; Sørensen & Torfing, 2011). However, innovations can both be about doing something new or improving something that already exist. Innovations are about seeing the opportunities and take advantages of them (Tidd & Bessant, 2013). Innovation is about novelty, improving or creating new products or services, exploring new markets or creating new methods. Innovation can be seen as both a process and an outcome (Crossan & Apaydin, 2010). Innovation is about creating value for society, business and individuals. This by providing new solutions to fulfill needs and demands (Government office of Sweden, 2012). The value of innovation is accessible both during the innovation process and when it is completed (Government office of Sweden, 2012), hence innovation is both a process and an outcome (Crossan & Apaydin, 2010). This study’s definition of innovation includes many aspects of previous definitions, but have a specific focus on the perceived value of the innovation for the citizens. That a new or improved service contributes to increases value for the citizens.

When creating innovation the innovation process can help, which describes the different phases of creating innovation. A common way of describing the innovation process is to divide it in three phases; ideation, development, and commercialization. The first phase include evaluating of the organizational problems and needs to decide what kind of innovation, solution they need. This also includes brainstorming and coming up with ideas and concepts. The second phase is about processing the idea and concept to refine it. The last phase is about putting the service or product out on the market to fulfill the users’ needs and to be commercialized (He & Wang, 2016; Mount & Martinez, 2014).

Innovation have for a long time been an important activity for organizations (Kankanhalli et al., 2017). Innovation is a useful source for competitive advantages in a fast evolving society. The world is constantly changing and therefore should firms also look to develop new and valuable capabilities. This takes time, money, resources and effort from the organization (Crossan & Apaydin, 2010).

2.1.1 Innovation in the public sector

The context between the private sector and the public sector differ and affect the way the organization innovate (Bekkers et al., 2013; Mergel & Desouza, 2013). One difference is that the private sectors focus more on developing new products while the public sector focus on improving services (Lee et al., 2012). Another difference is competition, where the public sectors lack of competition can reduce their desire to innovate (Bekkers et al., 2013). Innovations in the public sector is usually triggered by political or policy decisions, that decide a need for a service. (Mergel & Desouza, 2013; Bekkers et al., 2013).

"Public sector organizations are in large parts influenced by political authorities to act in the public interest and produce public goods and
services that are accessible equally to all citizens” (Mergel, 2015, 602)

The goal of innovation in public sector can be seeking a specific solution to a problem, creating new resources, increasing awareness of social and political problems and creating partnership with the public sphere (organizations and individuals) (Mergel & Desouza, 2013). The goal with innovation in the public sector is added value in terms of public benefit (Bommert, 2010; Lee et. al, 2012). Hence, the public sector isn’t the only one that should benefit from the innovation (Bommert, 2010). The public sector have mostly used a closed innovation approach, which means that organizations themselves created ideas, took care of the development and distribution of the innovation (Bommert, 2010; Kankanhalli et. al, 2017). The public sectors need to find new ways of innovating, to better handle the big changes in society (Bommert, 2010; Mergel, 2015). Many public sectors around the globe are now adapting to using open innovation, with a focus on social innovation (Lee et. al, 2012; Bekkers et al., 2013)

2.1.2 Open innovation in the public sector

Open innovation encourages organization to open up and search for valuable ideas and solutions outside the organization (Bommert, 2010; Mergel & Desouza, 2013). The public sector can use open innovation to gather good ideas of new ways to provide public services (Lee et. al, 2012). Open innovation in the public sector can improve awareness of social problems and increased trust between them and the citizens (Mergel & Desouza, 2013). Organizations use opportunities to work with external partners to find ideas and solutions that are out there (Lee et. al, 2012). Open innovation in the public sector requires higher level of inclusion of citizens. The public sectors need to listen to the citizens and involve them more in the innovation process. Therefore the public sectors are often in the early stages of adopting open innovation and often need more mature methods to handle it (Kankanhalli et. al, 2017). Innovations can be created within a network of actors, organizations. This has become more common even for governments, because it can increase organizations innovation capabilities (Levén, Holmström & Mathiassen, 2014). Network collaborations can be used in open innovation to improve public services (Sørensen & Torfing, 2011). Public sector and governments have started to facilitate open innovation through open data initiatives. Organizations using open data need to develop a way for feedback to know how the data have been used and what it has generated (Kankanhalli et. al, 2017). Another way is to include the citizens via crowdsourcing. Crowdsourcing make use of the crowd, which can provide a broad spectrum of ideas, knowledge and experiences, because of diversity in the population (Mergel, 2015). Crowdsourcing is a way of collecting collective intelligence of online communities to reach organizational goals, improve public participation and solve problems. Which means that organizations can involve external parties to generate ideas, solutions and collaborative experimentation (Mergel & Desouza, 2013).
"Crowdsourcing approaches allow collective intelligence to be leveraged to solve complex problems when resources or expertise are otherwise lacking" (Mergel & Desouza, 2013, 882). Crowdsourcing solutions and ideas can sometimes be unrealistic and might not be possible to implement (Mergel & Desouza, 2013). But user involved innovation are often more successfully commercialized, since the users have been included in the process and expressed their needs and wishes (Von Hippel, 2005). The knowledge and expertise from smart individuals outside the organization can be used by organizations for innovation purposes (Kankanahalli et. al, 2017). In the case of the public sector knowledgeable and well-informed citizens can be a driving force of innovation (Mergel, 2015; Government office of Sweden, 2012).

There are different types of users: lead users, end users, active users and passive users. Lead users are essential when it comes to innovation. Lead users are ahead of the population in regards to market trends, knowledge and demand more from a solution (Von Hippel, 2005). End users are the ones that will use the product or service, in the public sector are they usually the citizens. Active users can be a source for innovation by providing knowledge, skills, experiences and ideas that can be exploited by offering them to participate in the innovation process (Mount & Martinez, 2014; Bekkers et al., 2013). Passive users can provide the organization with useful information about wishes and needs (Bekkers et al., 2013). Innovations have been made democratized by inviting individuals to participate (Von Hippel, 2005). "Users of products and services – both firms and individual consumers – are increasingly able to innovate for themselves" (Von Hippel, 2005, 64). But why are users willing to give up there ideas for free? Users are willing to provide ideas and solutions freely if they think they will benefit from it. They might not be able to produce the solution themselves, but want it to exist so they can use it. They share ideas and solutions in hope that others can contribute to the idea and make it even better (Von Hippel, 2005). It can be beneficial on a professional level if their solutions come to use and they might be able to expand their professional network (Mergel & Desouza, 2013). Otherwise a competition can engage users to participate even if the price is glory and not economically reward. "Citizens who participate in competitions are enthused by the opportunity to create a solution that actually makes a difference in the public sector" (Mergel & Desouza, 2013, 882).

2.1.3 Social innovation
The interest in social innovation has increased in several countries and today many public sectors focus on social innovation (Government office of Sweden, 2012; Bekkers et. al, 2013). Social innovation have inspired politicians, policy makers and individuals to explore and implement new ideas on how society can handle its challenges and future challenges (Bekkers et al., 2013; Weerakkody, Ghoneim & Schröder, 2014). Changes in society have evolved in new challenges for the public sector and there is a need for addressing and solving these challenges (Weerakkody et al., 2014). Some challenges are: a growing and aging
population, economy and education. Social innovation aims to produce long lasting outcomes that are relevant for the society when it comes to its challenges and needs. In social innovation public value is important and the aim is to improve it. Social innovation involves relevant stakeholders (individuals, other organizations) in the innovation process, similar to open innovation. The involved stakeholders should have useful information, knowledge, experiences and resources and have the willingness to share this with others to co-operate and share ideas. In this context citizens have a more active role in society to help the public sector to meet their needs. Social innovation are described as innovations that are both social in their ends and in their means (Bekkers et al., 2013).

Open innovation, crowdsourcing and social innovation have one clear common denominator: user involvement in innovation. A popular method right now is to involve users in innovation through social media. Because social media can enhance innovation (Gallaugher & Ransbotham, 2010; Mergel, 2013; Bonsón et al., 2012; Kane, Johnson, & Majchrzak, 2014). Social media can be an effective tool to reach users for innovation purposes. It possesses the ability to improve the access of information and knowledge without geographical boundaries. It provides transparency and the ability to monitor and control communication and interactions with users (Bekkers et al., 2013).

2.2 Social media

Social media have existed since the late 1990’s, but grew in popularity in the mid 2000’s, much to do with the rise of social media site Facebook (Boyd & Ellison, 2008). In Sweden 77 % of Internet users use social media and 58 % uses it daily. Facebook is today the biggest social media site in Sweden where 71 % of the population uses Facebook (Davidsson, 2016). Social media are content sharing sites, blogs, social networks that are used to create, modify, share and discuss the content (Kietzmann, Hermkens, McCarthy & Silvestre, 2011). The information on social media is often based on user-generated content, which means that it is the users that produce all the information (Lunell, 2011). User generated content encourage users to share knowledge, information and ideas (Kane et.al, 2014). Social media promote collaboration, joint learning, and a speedy exchange of information between users (Bonsón et al., 2012). It also contributes to creativity, expertise and collective intelligence (Mount & Martinez, 2014). Social media can be blogs, discussion forums, sharing pictures and videos and some popular social media sites are; Facebook, LinkedIn, Twitter, Snapchat and Instagram. Different types of social media channels have different purposes and attract different types of demographics (Kietzmann et. al, 2011; He & Wang, 2016; Kaplan & Haenlein, 2010).

2.2.1 Communication tool

Social media are often described as a communication tool (Boyd & Ellison, 2008; Kaplan & Haenlein, 2010; He & Wang, 2016). Communication and interaction
between users are essential in social media. On social media users can communicate by sharing content, comment, tagging a person and using symbols; "like", "heart" etc. (Bonsón et al., 2012). Social media is about engaging others to communicate and interact with each other (Kaplan & Haenlein, 2010). Social media are a widely used communication tool (Boyd & Ellison, 2008), for both individuals and organizations (Gallaugher & Ransbotham, 2010). Social media enriches the communication between users and organizations, where both easier can interact with each other. This have also changed the interaction between organizations and users, where the user demands a deeper interaction and want the organization to listen to them, engage and respond (Kietzmann et. al, 2011). In that sense has social media democratized the market and now users have some of the power (Kietzmann et. al, 2011). But users also provide organizations with useful business intelligence, by providing feedback, opinions and suggestions (Gallaugher & Ransbotham, 2010). Social media also provide a monitor function so that organizations can see what users are saying about them and the users can follow the organizations on social media (Gallaugher & Ransbotham, 2010). Social media is cheap, efficient, have a direct contact with users and provide instant feedback (Gallaugher & Ransbotham, 2010; Kaplan & Haenlein, 2010). This make social media a relevant tool regardless how big or small the organization is, or if its a private company or a governmental agency (Kaplan & Haenlein, 2010).

### 2.2.2 Social media usage in public sector

Governments and public sectors are increasingly using social media to connect to their citizens (Bertot et al., 2012). Social media communication can improve public sector services, extract new ideas and contribute to problem solving (Bertot et al., 2012). Social media benefits are low costs, effective with a long reach that are appealing features for the public sector and governance on a budget (Bonsón et al., 2012). Social media usage in the public sector or government creates many new benefits. Some benefits are; democratic participation and engagement, co-creation and crowdsourcing solutions and innovations (Bertot et al., 2012). Social media are a good source for public opinion (Kietzmann et. al, 2011) and can be used by the public sector to engage citizens in social and political problems (Kietzmann et. al, 2011; Bonsón et al., 2012; Bertot et al., 2012). Compared to other organizations governments and the public sector need to follow policies, guidelines an particular laws that describe what they need to provide to the citizens. Democracy is important and declares that a government service should be available to everyone. They should provide services for everyone and everyone’s different needs. Social media can contribute to exclusion, for example if someone don’t speak the language or for people with disabilities that limit them to participate on social media (Bertot et al., 2012). Then they can use additional methods be used, like face-to-face meetings with the target group (Näkki & Antikainen, 2008; Kankanhalli et al., 2017).

Social media is used by many governments and public sectors to enhance transparency, participation and collaboration (Bonsón et al., 2012; Mergel, 2013).
Transparency is about providing public information to the citizens to increase their trust in the government (Bonsón et al., 2012; Mergel, 2013). Social media is a useful and effective channel for this since many people use social media and check it frequently (Mergel, 2013). Participation includes interaction with the citizens and engaging them in a dialogue that can facilitate creativity (Bonsón et al., 2012; Mergel, 2013). Organizations should listen to their users to find out their interests and needs. Interacting with the users will help organizations get that information. By engaging in discussions, actively asking for opinions or creating a forum for ideas. When finding out users interests and needs it gets easier to engage them in participating in social media. Because most users in social media have a desire to be active and engage and be able to both take part of and contribute to the content (Kaplan & Haenlein, 2010). The citizens can give feedback and opinions, which can help the public sector in knowing the citizens needs and provide better services. In collaboration users discuss, share and exchange information, thus creating new knowledge (Kane et al., 2014). The interaction between the public sector and the citizens are more intense and they can become co-creators and produce something together (Mergel, 2013). For participation and collaboration to work a two-way communication is needed to obtain benefits for both parties. Users demand feedback and there is a need for a social media manager to respond (Bonsón et al., 2012). The public sector can use social media to exchange ideas and thoughts to achieve the goal of the government mission (Mergel, 2013). It can also improve the quality of their service that they provide to the citizens (Bonsón et al., 2012; Mergel, 2013; Gallaugher & Ransbotham, 2010). This might be by providing a new way to get service (Bonsón et al., 2012). However, most governments and public sectors mainly use social media to provide information and not to engage citizens in participation or collaboration (Bonsón et al., 2012).

Users reasons for participating actively in social media are driven by their motivation. Many previous studies have identified motivational factors for using social media. The intention to participate in social media are divided in two direction; intrinsic (inherent) and extrinsic (outer) motivation. Intrinsic motivation are motivated by satisfying personal needs and extrinsic motivation are motivated by the desire to attain a reward or avoid punishment (Mount & Martinez, 2014; He & Wang, 2015). Users are motivate to participate when it include a mix of fun (intrinsic), financial compensation (extrinsic) and improved reputation (status incentives). However, an individual’s interest in a brand, product or service can in it self create enough motivation for the user to co-create with the organization (Mount & Martinez, 2014). In general users are motivated by doing something for them self (Von Hippel, 2005). The more active the public sector are on social media, the more the citizen expect from them in regards to social media presence (Mergel, 2013). Citizens are expecting reciprocity and near real-time responsiveness from governments (Mergel, 2013). Even if government or public sectors aren’t present in social media, citizens are going to discuss them,
which they should be aware of. In many aspects it is more risky for public sector not to be present on social media. If they are present at least they can be involved and try to improve (Bonsón et al., 2012; Mergel, 2013). However, social media are very powerful and can both help or hinder an organization. It is therefore important for organizations to know how to handle social media. At the moment there are many organizations that lack the knowledge and understanding of how to use social media in an organizational setting. Lack of understanding of how to use social media has led to many organizations ignoring to use it. Even some organizations that actually use social media do not possess enough talent or capabilities to succeed (Kietzmann et. al, 2011).

2.3 Social media usage in the innovation process

Previous studies on social media usage in innovation have mainly focused on implementing it in the idea phase, as a crowdsourcing function (Mount and Martinez, 2014). The same goes for the pubic sector and government that have mainly used open innovation and specifically crowdsourcing as a method to search for ideas (Mergel 2015). However, social media can be used throughout the entire innovation process (Mount & Martinez, 2014; He & Wang, 2015; Nääki & Antikainen, 2008). The innovation process is usually described through three phases: ideation, development, and commercialization (Mount & Martinez, 2014; He & Wang, 2015; Nääki & Antikainen, 2008). These phases do not have to be consecutive and can sometimes be intermittent or even parallel. When this applies is it often called the innovation cycle, which are non-linear (Schoen, Mason, Kline & Bunch, 2005).

2.3.1 Ideation

The first phase is about searching and collecting ideas and needs (Mount and Martinez, 2014; Nääki & Antikainen, 2008) to identify the problem they want to solve (He & Wang, 2015). Then evaluate these and identify the problem and potential solutions (He & Wang, 2015). This has been done through one-way interactions, where the organizations often are passive and only collect the users ideas. The purpose of this has usually been about getting user engagement and not to co-create or implement the innovation (Mergel, 2015). In the idea phase very little control is needed from the organization and they can use social media to reach a broad crowd of people to generate ideas (Mount and Martinez, 2014). This phase do not demand high engagement from either users or organizations. This because the idea phase has no restriction and users can contribute with anything (Nääki & Antikainen, 2008). Having no restrictions in the idea phase, contribute to users providing innovational ideas that could be both radical and incremental. This enables organizations to pursue dual processes of innovation exploration and exploitation (Mount and Martinez, 2014). Within the government context this phase have usually included crowdsourcing for ideas from users (Mergel 2015).
2.3.2 Development
The second phase is about choosing an idea or a concept and refining it to then be able to develop it (He & Wang, 2015; Mount and Martinez, 2014). The public sector usually uses this phase to get users opinion on a solution or a particular problem. The public sectors are dependent on the interaction between users and can benefit by including voting function on submitting ideas (Mergel, 2015). The organizations need to further develop the ideas and turn them into a product or a service (He & Wang, 2015). This phase have more restrictions, since the organization wants to refine a particular idea and want to get deeper knowledge from the users (Näkki & Antikainen, 2008). It demands more control from the organization and they should lead the interaction and create engagement (Mount and Martinez, 2014). The organization can provide potential scenarios and concepts and the users can provide needs, feedback and ideas (Näkki & Antikainen, 2008). The organization can also use opinion polls, voting, pictures, competitions and conversation forums to gather users input and control the interaction so it don’t get off-track (Mount and Martinez, 2014; Mergel, 2015). This phase attract fewer participants and only include the most active, knowledgeable and interested users (Mount and Martinez, 2014).

2.3.3 Commercialization
The last phase is about reassuring that the product or service can be successful on the market (Mount & Martinez, 2014; He & Wang, 2015; Näkki & Antikainen, 2008). Here the organization can develop prototypes and get feedback from users, based on their experience of using it. This phase is the most controlled and is used to reach potential lead users, the ones that can promote the service or product to their peers. Because it is essential to understand customer needs to become successful on the market (He & Wang, 2015). Even after commercialization users can provide input and give ideas for improvements (Näkki & Antikainen, 2008). The public sector or government usually doesn’t involve users in this phase (Mergel, 2015).

Users can contribute and co-create through social media throughout the innovation process (Mount & Martinez, 2014; He & Wang, 2015; Näkki & Antikainen, 2008; Bekkers et al., 2013). But that the most active, interested and maybe knowledgeable ones that are more likely to be collaborated with throughout the entire innovation process, for example active or lead users (He & Wang, 2015; Mount and Martinez, 2014; Bekkers et al., 2013; Von Hippel, 2005). The engagement from the organization gets more demanding with each phase and they need to control the interaction on social media more with each phase in the innovation process (Näkki & Antikainen, 2008). The use of social media can have a positive effect on all stages of the innovation process, even if the contribution in each stage is different (Mount and Martinez, 2014). Creativity, expertise and collective intelligence are created by interaction with users that are useful throughout the innovation process (Mount and Martinez, 2014). It may be preferable to use different social media tools for each step of the innovation phase,
depending on the context, the idea and phase in the innovation process (He & Wang, 2015). But keep in mind that the innovation process does not have to be step-by-step, it can be intermittent, parallel or a cycle (Schoen et al., 2005). Social media makes it easy to involve many users in the innovation process (Bonsón et al., 2012; Bekkers et al., 2013). Since online tools are not bound to a particular location can users participate whenever and wherever. It also provides a permanent connection to users that can be useful even outside the innovation process (Näkki & Antikainen, 2008). However, for it to work active and engage user are needed (He & Wang, 2015). Organizations need to be able to create engagement and motivate them to participate (He & Wang, 2015; Näkki & Antikainen, 2008; Kietzmann et. al, 2011). For this knowledgeable and skilled leaders are needed that can socialize and engage users (He & Wang, 2015; Mount and Martinez, 2014).

This shows that social media is possible to use in all phases of the innovation process. However, it is preferable to use both online and offline methods to involve users and gain knowledge about their needs and hear their ideas (Kankanhalli et. al, 2017; Näkki & Antikainen, 2008). But social media makes it easier to involve them throughout the entire innovation process (Näkki & Antikainen, 2008). Social media is a cheap and effective tool for co-creation and innovation and therefore organizations should use it to collect users inputs (He & Wang, 2015; Gallaugher & Ransbotham, 2010; Kaplan & Haenlein, 2010; Bonsón et al). Social media are envisioned to be one of the popular tools for co-creation and innovation in the near future. "We envision that innovation and co-creation will become the nucleus of the next generation of social media" (He & Wang, 2015, 275).

The literature review provides me with useful information and knowledge and will work as my theoretical approach for this study. The joint knowledge and ideas of previous research within innovation and social media will guide me through this study. The last part of the literature review will give me direction on how social media can be integrated and used in the innovation process. The theoretical approach provided me with a good structure and base that was used during the analytical process and foremost in the discussion.

3. Method

This is a qualitative study and qualitative research has a naturalistic, interpretive approach and aim to understand the meanings people attach to phenomena (actions, decisions, beliefs, values etc.) within their social worlds (Hartman, 2004; Ritchie & Lewis, 2003). Qualitative methods are in general interested in a deeper understanding of phenomena and have a holistic approach, which include understanding the phenomenon within a context (Ritchie & Lewis, 2003). This study aim to both interpret and understand the phenomena studied, which are social media and innovation, within a specific context, a municipality. Which makes this a case study. Case studies are characterized with using one study object
and study that intensely and detailed in a specific context (Ritchie & Lewis, 2003; Bryman, 2011). One distinct feature a case study has is multiple perspectives in a specific context. This can be by using multiple data collection methods or collecting data from people with different perspective (Ritchie & Lewis, 2003). This study will use both these methods by using multiple data collection methods and interviewing people with different perspective. Different views in the same context can contribute to a detailed in-depth understanding (Ritchie & Lewis, 2003). The case study concerns Municipality A1, a municipality in northern Sweden. It is a medium-sized municipality, which are defined by having at least 50 000 citizens and must have between 40,000 - 200,000 citizens living in the largest urban area in that municipality (Sveriges kommuner och landsting, 2016)

Qualitative research can be generalized, meaning that the result can be applied to other studies. Even if qualitative research can’t be generalized on a statistical basis, it can be generalized through the concepts validity and reliability. Validity means sustainable and reliability means well grounded and these concepts help strengthen the data. Reliability generally is concerned with the replicability of research findings and if they can be repeated in other study using the same or similar methods. Validity refers to how believable the study is and conquest of two aspects: internal validity and external validity. Internal validity is about whether the study actually studies what’s intended and external validity is about the possibility of generalization to other studies (Ritchie & Lewis, 2003).

To get a deeper understanding of phenomenon, one need a data collection method that can provide rich and detailed information (Ritchie & Lewis, 2003). A qualitative data collection method aim to gain understanding about a subject perception from an individual or group (Hartman, 2004). For this study I have chosen semi-structure interviews, which can provide a deeper data material. Interviews benefits from having a second data collection, and therefore I also conducted an analysis of one of the municipality social media sites. This is called triangulation, when two or more methods are used in the study (Bryman, 2011), in this case two data collection methods. These two methods will be presented in more detail below.

3.1 Data collection method
3.1.1 Study of social media
The first data collection consisted of studying the municipality’s use of social media. Inspired by the method netnography, which aim to study social construct in social media (Kozinets, 2011). I have chosen to analyze Municipality A:s use of Facebook, both because it is their main social media channel and also because Facebook is the biggest social media site in Sweden where 71% of the population use Facebook (Davidsson, 2016). I studied three months posts on Municipality A’s Facebook page. I studied the municipality’s interactions that included posts and comments. I also studied the citizen’s interactions: comments and likes. This

1 The municipality in this study is anonymised and Municipality A is its alias
because I wanted to get a glimpse of how the interaction between Municipality A and their citizens were on social media. The study of social media is a small part of the data collection and is intended as a complement to the semi-structured interviews.

3.1.2 Semi structured interviews
The second data collection method and my main data collection consisted of interviews with employees at the municipality. Interviews are the most common data collection method and often used in interpretive studies as a main data collection method (Bryman, 2011; Walsham, 2006). Interviews are a suitable method to use when the information and knowledge are easiest maintained through a person telling you about it, for example questions about behavior, attitude and experiences (Hartman, 2004).

I used semi-structured interviews, because the answers tend to be richer when the questions are more open-ended. Semi-structured interviews follow a set of pre-decided themes or broad open-ended questions. The order of the questions may change between interviews, but all questions should be discussed. Semi-structured interviews are more flexible and the interviewer can ask follow up questions. It is a flexible method and is dependent on the interviewer to interpret the participant's answer and body language. Semi-structured interviews are useful when the researcher has a clear focus on a particular topic that it wants to research. The pre-decided questions or themes can help the researcher to keep the participant to the topic, but at the same time be able to talk freely (Bryman, 2011). With this in mind I constructed an interview guide (appendix 1) that touched on three relevant themes: municipality, innovation and social media. The theme municipality was relevant to get a better understanding of the context of my study, what makes this context different then others? This theme includes questions about what a municipality do and what restriction it has. Questions within innovation were asked using other words to describe innovation, like seeking opportunities, ideas and inspiration. This because innovation do not have a clear definition and are often associated with high tech product development, when it actually includes so much more (Crossan & Apaydin, 2010). The social media questions had focus on communication and interaction between the municipality and its citizens. Overall the interview questions were influenced by related research, which also works as my theoretical approach for this study. I used the same interview guide on all respondents, but alternated the order in which the questions were asked, based on their perceived knowledge. Where I started out with the theme where their expertise was and then ended with the theme they knew less about. This to make sure that the most relevant questions for each respondent would be asked.

I interviewed five employees at Municipality A, with different occupations (Appendix 2). Two worked with social media, one with a management perspective. Two work with improving municipality procedures, both with a citizen dialogue perspective. Four of the interviews was face-to-face interviews and were conducted
individually in each respondent’s office. One respondent was interviewed over the phone, due to geographical distance. When conducting an interview it is important to make the participant feel comfortable (Walsham, 2006) and therefore I let them decide the place for the interview. All respondents approved audio recording, which made the data procedures easier, especially when using quotes. There are both pros and cons when using audio recording. Pros are that you don’t miss anything that is said and you can have your full attention on the respondent. Cons are that participants can feel uncomfortable (Bryman, 2011) and that it is time consuming and to not capture non-verbal elements like body language (Walsham, 2006). However, I feel that there are more benefits with audio recording, because then can the researcher focus on the respondent instead of taking notes.

3.2 Sampling methods
I used convenience sampling when choosing the respondents for the interviews. Convenience sampling means that one chose people who is easily accessible (Ritchie & Lewis, 2003), which is advantageous because it is easy, comfortable and saves time (Bryman, 2011). This is a common sampling method within qualitative research and is common in case studies (Ritchie & Lewis, 2003), where the object of the study, the organization chose which respondent that will take part of the study (Bryman, 2011). I used this sampling method because I was dependent on respondents from the municipality in the case study. However, I left suggestions and wishes of what kind of characteristics I wanted in the respondents. I wanted a so-called purposive selection, where the characteristics of the respondents are the important part (Ritchie & Lewis, 2003), which in this case where knowledge and experience within social media and innovation. I think it was beneficial to go through the organization to find good respondents, because they have more knowledge of the people working there. I also used purposive selection when choosing which social media platform to study. Which was selected because it is the municipalities main social media channel and the biggest social media platform in Sweden (Davidsson, 2016).

3.3 Ethics
I followed the four ethical guidelines provided by the Swedish science council (vetenskapsrådet); information requirement, the consent requirement, the confidentiality and use requirement (Vetenskapsrådet, 2002). I informed the respondents about the study and got their consent. In regard to confidentiality, did I choose to use alias on both the municipality and the respondents, to anonymize them.

3.4 Data procedures and analytical method
I used the method theoretical analysis to process and analyze the collected data material from both the interviews and the study of social media. "Thematic analysis is a method for identifying, analyzing and reporting patterns (themes)
within data” (Braun & Clarke, 2006, 79). The method is helpful to summarize and analyze the data with help of extended phrases or sentences instead of short codes (Saldaña, 2013). It reduces the dataset and the remaining data consists of detailed and rich information. The themes that emerge from this method are often influenced by the research question (Braun & Clarke, 2006). The procedures of theoretical analysis are not set in stone and are quite similar to other qualitative methods, but I chose to follow Braun and Clarke’s (2006) six phases of theoretical analysis, presented below.

**Six phases of theoretical analysis**

1. **Read through your data set**
   This step is about familiarizing yourself with your data, by transcribing it, reading through it multiple times and writing down comments and ideas (Braun & Clarke, 2006). All interviews were transcribed to make the data procedures easier and the researcher can conduct a more thorough and reliable analysis (Fejes & Thornberg, 2009).

2. **Coding**
   This step is about coding the data (Braun & Clarke, 2006) and I chose to use initial coding (open coding) for the interviews. Keep codes simple and give them direction and keep the codes according to the respondent’s words (Charmaz, 2006). I used descriptive coding to code the Facebook posts. Descriptive coding summarizes in a word or a short phrase the topic in the text (Saldaña, 2013).

3. **Searching for themes**
   This step includes putting all the codes into potential themes. Here can an initial thematic map be of help to get an overview of the themes and codes (Braun & Clarke, 2006). With my theoretical approach in mind, which is based on my literature review, I searched for themes. I used an initial thematic map to structure the findings in the data material.

4. **Reviewing themes**
   This step is about making sure that you have appropriate themes in regard to your data set. Here an updated version of the thematic map can help (Braun & Clarke, 2006). I created an updated version of my thematic map to see which information in the data material was most relevant. I created one theoretical map for the study of social media (Appendix 3) and one for the interviews (Appendix 4).

5. **Defining and naming themes:**
   This step is about refining the remaining themes, by specify them and maybe renaming them to a more appropriate name for the theme (Braun & Clarke, 2006). Yet again, I had my theoretical approach in mind when naming the themes.

6. **Producing the report**
   This step includes both a summarization of the data material and thereafter analysis it by comparing it to previous research (Braun & Clarke, 2006). I will present a cohesive text that summarizes the analyzed data material, both interviews and study of social media. This will be presented under results and in the discussion will I compare it to previous research.
4. Results
The results from the interviews are presented together in a cohesive text. The structure of the result is based on the themes that arose during the thematic analysis: municipality, innovation and social media. The theme communication that also arose from the thematic analysis will be presented throughout the entire text, because it relates to both innovation and social media. The result from the study of Municipality A:s Facebook page will be presented simultaneously within the text, because it was only used as a complement to the interviews.

4.1 Municipality
A municipality is politically managed, which means that decisions need to be decided by the politicians in the region before they are adopted. Municipalities are governed by the municipal law, which conclude what municipalities need to provide; service and government practice within the region. They do not have to provide all the service themselves, but they are responsible for it being done. "Our mission is to create community service for those living in the municipality" (Bertil). Democracy is important to the municipality and they need to follow the municipal Act that concludes that everyone should be treated equally. Being politically managed and having a democracy approach can slow down the process when it comes to adapting to new things.

"Democracy takes time and it should take time. It takes an awfully long time before we make decisions, but it is because we want to collect all perspectives and be able to conduct debates on different issues. A company with ten employees can make decisions fast, but we are a municipality, which can be experienced as sluggish and difficult from different sources. It takes time, we are not first with many things, but it is for better or worse" (Cecilia)

4.2 Innovation
Municipality A continuously aims to improve themselves and the services provided to the citizens. Some current improvements in the municipality are a new e-service platform, costumer service and creating development plans for some of the municipality's district. They also use open data to invite others to innovate and add value to the society.

"We publish something called open data, where companies can use data from the municipality to commercialize in products. It could be an app or anything. So we use our digital platforms to say: here are a lot of data from the municipality that are open to everyone, take them and create something" (Bertil)

Most of the change and improvements come from within the organization or from a political decision. However, to get new knowledge, ideas or to get inspiration that can be useful to improve, employees have been too different workshops, seminars, conferences and courses. Erika was at a Social Innovation
conference earlier this month and was inspired. She described what the conference was about:

"Collaboration between public, civil and business. How can we find other ways to work than to be divided and how can we work together to improve and evolve. There are societal challenges that municipalities and county councils do not manage by themselves anymore. Can we think of another way and interact and work together instead. It's about finding a new way to work in the future to be able to cope with our societal problems" (Erika)

Municipality A is interested in working with social innovation, but is right now only in the idea stage. They hope to be able to create a public health project, where the citizen would be a co-creator. Municipality A is also a part of different networks that can provide useful inputs. One particular network that Municipality A is a part of is Swedish municipalities and counties (SKL) network for citizen dialog. This leads us to the biggest source for improvement, citizen dialogue. Municipality A thinks that the best way to improve is to ask the users, the citizens what they think and need.

4.2.1 Citizen dialogue

Communicating with the citizens are important for the municipality, not just to keep a good relationship between them, but also to be able to improve the services they provide to the citizens. They aim to have a dialogue with the citizens to hear their opinions and understand their needs. Municipality has worked with citizen dialogue for some time now, but it was just recently they developed guidelines for citizen dialogue. Cecilia was one of the people that developed the guidelines and describe them as a good tool to use to get some structure in the dialogue.

"It is always in the municipality’s interest to snap up what is happening in Municipality A and what people want. The thing that have been missing earlier is a clear structure on how we want work, but now do we have these documents strategy and guidelines determine how to think about different issues." (Cecilia)

The guidelines include what they want to achieve, but do not specify which methods to use to conduct a dialogue with the citizens. They can use both analog (posters, mail) and digital methods (email, webpage, social media), but the most used are physical meetings, face-to-face. Both Cecilia and Erika think that the face-to-face meetings are the most rewarding and that all others methods should be used complementary.

"We have different channels, but the most important is probably the daily contact in front office. The personal meetings when they come to us or when we go out and meet the community or business community, meeting people in different places, telling them about our business." (Erika).
Erika works at the citizen’s office and works closely with the citizens and citizens questions and needs. She states that communication is an important part, since it enables them to gain knowledge of citizens needs and improve their service to the citizens. The municipality is working on development plans for some of the municipality’s district, where they involve the citizens from the district to participate and share their thought, ideas of what need to be done. "It's the ones who live there who know best what's needed. So communicating with the citizens is a part of the whole procedure of developing a development plan” (Cecilia). One challenge in citizen dialogue that often was mentioned by the respondents was about finding the "right” people to talk to or target groups. A municipality is a big organization that provides services for all people in the region, which means that all services should be available for everyone. Municipality A want to have a democratic approach where it is important to get multiple perspective from different target groups.

"A civic dialogue does not have to be a failure because you only meet ten people, but it is about finding ten people with ten different perspectives, that's usually mush better, you gain much more than if you meet three hundred who all think the same thing” (Cecilia)

To be able to reach out to different target groups it is important to know how to reach that particular target group. "You have to work in many different ways, and it is important to find which channel is suitable for each target group” (Cecilia). For example they visit a high school when they wanted to reach young people and when they wanted to reach older people they visited a retirement home. This to inform them about the municipality and the questions they are working on, but also to get information about what needs each target group has. Cecilia thinks a big issue is to reach different target groups. It is important to know beforehand what they want, so they know which groups they want to reach and thereafter decide on an appropriate method. Cecilia states that they need to get better at actively finding the right people and also use the right method to reach them. Cecilia tells that she is going to a workshop where they are going to discuss structured dialogue and hope that it can be a start for improving their procedures for finding target groups.

Most citizen dialogues have been done through face-to-face meetings and these meetings have been to discuss a particular problem. The citizen dialog has therefore mainly been about particular questions and not to maintain a continuous dialogue with the citizens. They have used continuous dialogue before, when Municipality A developed its vision 2050. Then they had two years of continual dialogues and meetings with citizens or and local companies. In the future they want to work more with continuous dialogue to be able to detect potential problems and deal with them before they get to big. Municipality A mainly involve the citizens in the first phase of the innovation process; ideation. They reach out to citizens to gain knowledge about the citizens needs and to gather information and ideas from the citizens. When they have a particular problem to
fix they use the second phase in the innovation process; development. However, they involve citizens to a high degree, just to get input on the particular problem area.

Respondents advocate face-to-face meeting or encounters, but think that social media can be a complementing tool for interacting with citizens. It is especially an efficient tool to reach many people, which are preferable when working with democracy. Social media can counteract some exclusion by providing an alternative method to access the information if you are unable to be at the face-to-face meeting. "You can sit in your living room or kitchen and participate in a digital discussion, you do not need to move to a place" (Bertil). Erika thinks social media can be one way of reaching out to particular target groups, but then it is important to know which social media channel to use.

"The basic principle of democracy is actually the dialogue and I think the physical encounter is the most important thing. There isn't much that beats a physical meeting, but I think social media can be a great complement to use" (Cecilia)

4.3 Social Media
Municipality A uses social media to communicate with its citizens. The purpose of social media is both to share information with the citizens as well as having a dialogue with them. "I see them (social media) as a way to open up for an in-depth civil dialogue" (Bertil). Municipality A works with three social media channels; Facebook, twitter and YouTube. Facebook are their main social media channel, which they use to reach many people and different target groups. "We need to be where our target groups are. Since more than 70% of the Swedish population is on Facebook, is it logical to move some of our business to Facebook" (Adam).

They see both risks and possibilities with using social media. One risk is excluding people that don't use social media. "One risk is that we exclude some people that have chose to not use or can't be on Facebook" (Adam). Another risk is related to the municipality being politically managed. Respondent mention that comments can get inappropriate and sometimes hateful when they post something with political content. "How should we handle that discussion? We that don't have a political opinion" (Adam). They also mention that it can be difficult to respond to citizen's questions when it is political, since they, as employees need to be neutral. We should not be political in what we say, so even if it's a politically-controlled workplace, we're not politicians" (David). However, they say that these comments do not happen so often. Which is something I also noticed when I studied their Facebook page. The comments mostly consisted of positive feedback, questions or that people "tagged" each other in the post. Most questions where answered and sometimes even other citizens answer the question asked before the municipality. Which can indicate that the municipality need to get faster at responding or that they just have very fast responding citizens.
The respondent mostly saw the possibilities with using social media and mention some positive aspect like; reach many people, cheap tool, increase citizen engagement, more convenient, instant feedback and improve democracy and citizen dialogue. Sweden’s municipalities and counties (Sveriges Kommuner och Landsting, SKL) have developed guidelines for how the municipality should handle social media, these have Municipality A adopted and formatted according to their needs.

4.3.1 Improvements
Overall Adam is pleased with how the municipality works with social media, but there is always room for improvement. Their main focus is communication with the citizens, where social media are one way of doing it. They rarely look at improving just social media, but rather think improving communication, which social media is a part of. "We see social media as a tool in a toolbox" (Adam). Adam thinks that the municipality website still is one of the most important digital communication tools for the municipality, but that social media are a great complement. One improvement Adam would like to see is to get better at using the strengths of each social media site, instead of using them exactly the same. The municipality also wants to improve their response time and be able to answer citizens question faster and provide feedback. Right now they are working on integrating social media in their costumer service. This will provide citizens with a fast method to come in contact with the municipality and get fast answers. One problem that will remain is that the municipality still has working hours and can’t provide instant feedback during evenings and weekends. This can sometimes limit what they can do on social media.

"I mean we work between 8-17. Other organizations have more opportunities to chose how to present them self. But we have an office time that is very sacred" (Adam).

4.3.2 Marketing
Municipality A has especially invested the use of social media in their marketing of the region. "We have a goal, 10 000 more citizens, that we works towards. We believe that everything will be better if you market Municipality A" (David). They use social media to communicate with the users and aim to attract visitors and keep existing citizens satisfied. This by providing information, answering comments and also invite the users to share pictures with them. They have multiple times arranged picture competitions to get more engagement from citizens. The first time they competed in "Placebrander of the year", a competition about place marketing, they competed with a video made together with the citizens. The video included citizens telling other people about the place, a visualization of word-of-mouth and storytelling video about the place. Since then they have used the same concept of including citizens and telling a story about the region, which have resulted in a win in "Placebrander of the year".
4.3.3 Engagement
Municipality A aims to have a dialogue with the citizens to get their opinion and feedback on the municipalities work. A key to accomplish this is to have engaged citizens that want to participate, which the municipality is struggling with right now. "The truth is, quite frankly we rarely get any opinions on or work. Many people use our Facebook page to stay updated and see what’s happening” (Adam). However, Adam see the importance of engagement on social media and that they need to get better at creating it themselves. "You have to start trying to increase the engagement and then you might get ideas about something else” (Adam) "We want engagement, but we also know that we can be much better at trying to create engagement ourselves” (Adam). He also mentions the importance of finding the "right" people, the ones that are engage and interested. "There are many people that have engagement, but we must know about them and how do we know them?” (Adam).

One recent example of when they got engagement from a citizen was earlier this year when a citizen sent in an idea for Valentines Day. The citizen suggested that the municipality could plow a big heart on the ice to create a love-walk. Unfortunately that was not technically possible at that time, but still an idea to consider for another year. "It was a great idea that we still have with us” (Adam). An idea the municipality has to create more engagement is to involve politicians more in social media. Since they are a politically managed organization, they want to increase the engagement from citizens when it comes to political questions and issues. Their idea is to have politicians interact with citizens through social media. "One idea is to bring in politicians to our Facebook page to discuss current questions with citizens and present where their party stands in the question, such as an arena” (Adam). "A small council on the square, but on the digital square.” (Bertil). Another idea to encourage citizen engagement in political question is to simplify the process of getting a citizen proposal to the politicians that decide in the matter. The idea is that if one per mille of the citizens "likes" a suggestion it automatically go up to the municipality board that make a decision.

When I studied their social media page I noticed that their where very little engagement and dialogue between the municipality and the citizens. The citizens where most engaged when something fun and exiting was posted like an event or activity. Then they got close to 1000 likes and around 20 comments per post. However, the comments mostly consisted of positive feedback or that the citizens "tagged” each other in the picture, so there weren’t much dialogue. The more "boring” posts, urgent news or political content, did not get that much engagement at all and got very few likes and rarely any comments.

4.3.4 Co-creation
Municipality A mostly uses their social media to share information and answer citizens questions, but they have a few examples of when they have co-created with citizens. With inspiration from the concept used when marketing Municipality A have also created a video about the municipality with the help of the citizens.
When the municipality reached 75,000 citizens they went out on social media and asked citizens to submit a 75-second video about what they liked about the municipality. "We received 30-35 videos, some really good, even professional, one even wrote a song about how wonderful it was to live in Municipality A" (Bertil). Seven of the videos were chosen and put together in a video to celebrate that the municipality had reach 75,000 citizens. Municipality A is good at involving citizens in videos to promote the area. The citizens are involved in the ideation phase by contributing with ideas and in the development phase because they co-create by sending in own videos. The commercialization phase is the only phase where citizens weren't included because the municipality selected the videos included in the final video.

In 2013 did the municipality update their website and as a part of that process they involved the citizen through a beta-test. They posted the beta-test on their Facebook page to get citizens opinion and suggestions. Adam thought they had great response on the beta-test and would definitely like to use that method again. This is a perfect example of including the citizens in the commercialization phase in the innovation process. Where the citizens can give feedback to a somewhat finished product.

A co-creation concept they have used multiple times are an interactive map that citizens can contribute to. First time they used the concept where some years ago, when they posted a interactive map on Facebook over the central parts of the municipality and asked: "What do you want to do in Municipality A?" Then citizens could freely add suggestion on what they wanted, where and why. They received hundreds of proposals, ranging from a "Hollywood sign" to where to build houses. They have recently used this concept with interactive map when improving different district in the municipality. Then they opened up an interactive map where citizens could mark with symbols, the good and bad places and also comment on why. "A heart was a positive symbol that showed that it was a good place and the reasons why. Then you could put another symbol with something that is not very good, where you might need a improvement" (Bertil). This way did the municipality get citizens opinions and feedback in a more interactive and precise way, when they could mark out where the problems where. All these co-creations with citizens got a lot of responses and the municipality wants to work more like this.

5. Discussion

I have discovered three main findings during my study: democratic innovation, communication and social media usage in the innovation process. First finding concerns the public sectors contextual challenges that can affect how they work. The second finding concerns the common denominator in how the public sector work with innovation and how they use of social media. The third finding concerns how the public sector uses social media in the innovation process and
how they could use it.

5.1 Democratic innovation

Before conducting this study I had the assumption that politics, laws and restrictions would play a big role in terms of challenges for the public sector. Previous research have focused on this aspect when describing the context in which the public sectors operates in (Mergel & Desouza, 2013; Bertot et al., 2012). Politic, laws and other restriction may slow them down more then other organizations, but isn't the biggest challenge. During this study did I instead discover a much bigger challenge for the public sector, which regards to their democratic perspective. The public sector have a democratic approach and want to create services for all citizens and their needs, which means that the services should be equally accessible to all (Mergel, 2015; Bertot et al., 2012). Thus, the public sector has a huge number of target groups that they want to provide service to and fulfill all needs that exist, which is a big challenge. In this aspect, is it not surprising that the public sector shows interest in social innovation (Government office of Sweden, 2012; Bekkers et. al, 2013).

5.1.1 Social innovation

The public sector wants to be able to handle both current and future societal problems and challenges, this to be able to provide good services to all its citizens. During this study I identified the importance of interaction between the public sector and its citizens. The public sectors feel that it is important to have a good contact with the citizens in order to identify their needs. This corresponds with the purpose and execution that is used in social innovation (Bekkers et al., 2013; Weerakkody et al., 2014). Citizen involvement in innovation can provide a broad spectrum of ideas, knowledge and experiences, in other words, they can be a driving force of innovation (Mergel, 2015; Government office of Sweden, 2012). Involving citizens in innovation create more challenges for the public sector in regard to democracy. The democratic perspective requires that the public sector have the ability to reach as many as possible to meet everyone's needs.

5.1.2 Are social media democratic?

If social media is democratic or not, is a tricky question. Both Von Hippel (2005) and Kietzmann et. al (2011) mention how social media have democratized the market thanks to user involvement. Many qualities that social media has indicate that is could be good for democracy. It is cheap, effective (Gallaugher & Ransbotham, 2010; Kaplan & Haenlein, 2010) and has a broad reach without geographical boundaries (Bekkers et al., 2013). Social media enables participate for many that otherwise couldn't participate due to disabilities, geographical distances or other reasons. However, it does also contribute to exclusion since they can’t reach everyone with social media (Bertot et al., 2012). For example the ones that don’t speak the language or the ones with disabilities that limit them to participate on social media (Bertot et al., 2012). My realization regarding this is
that social media can help the public sector to reach their citizens, but they will always need to use multiple methods to reach all of them. Previous research states that (Näkki & Antikainen, 2008; Kankanhalli et. al, 2017) face-to-face meetings can be used to reach the citizens and I have discovered that face-to-face meetings are one of the most common ways for the public sector to connect and involve citizens. But I do believe that the public sectors always need to use multiple methods to be able to reach everyone. This includes the use of multiple social media channels, as previous research states: "Different types of social media channels have different purposes and attract different types of demographics" (Kietzmann et. al, 2011; He & Wang, 2016; Kaplan & Haenlein, 2010).

5.2 Communication - the road to innovation
I have identified one common denominator between the public sectors innovation procedures and their use of social media. Communication! Their innovation processes are highly based on identifying citizens’ needs, largely through dialogue with the citizens. At the same time is social media in the public sector used for the same purpose, to have a dialogue with citizens. That these are used with the same purpose suggests that there is a great opportunity for the public sector to combine them.

5.2.1 Social media usage in the innovation process
Mount & Martinez (2014), He & Wang (2015) and Näkki & Antikainen (2008) all state that social media can be used in all phases of the innovation process. Based on my findings in this case study and their previous research I state that this is possible in a public sector context as well. The ideation phase is the main usage area for the public sector and they use it sporadically to gather information about citizen’s needs. The public sector could use it to have continuous conversations with citizens to easier identify future needs and problems. Citizens can then easier send in interesting ideas that the public sector haven't though of yet. The development phase are rarely used by the public sectors, where the main usage area consist of getting citizens thoughts on a problem already identified by the public sectors. The public sector could use it for solution purposes to co-create with citizens, because citizens’ knowledge and skills can contribute to solutions ideas that can become reality by co-creation. As both Mergel (2015) and Mount & Martinez (2014) suggests it is useful to use opinion polls, voting, pictures and competitions in this phase, to engage citizens to participate. The commercialization phase are very rarely used by the public sector, as Mergel (2015) also stated. This phase could be used for evaluating purposes, to get feedback from citizens on old, new or improved services to keep improving and learn from it, thus gaining knowledge.

He & Wang (2015), Näkki & Antikainen (2008) and Kietzmann et. al (2011) states that engagement are important when using social media for innovation. Based on my study, I can only agree and state that engagement is a key component when it comes to social media use in the innovation process.
Engagement from both users and the public sector are needed because the public sector needs to be able to create user engagement. Therefore is it important to know what motivates users to engage, and user motivation is mentioned in many articles; (Von Hippel, 2005; Mount & Martinez, 2014; He & Wang, 2015; Näkki & Antikainen, 2008; Kietzmann et. al, 2011).

5.3 Limitations and future studies
The limitation for this study mainly regards generalization, since this is a case study that only has investigated one municipality. However, this study can’t be generalized on a statistical basis, but it can be generalized through the concepts validity and reliability (Ritchie & Lewis, 2003).

This study together with previous research helped me identify some possibilities of using social media throughout the innovation process. However, I have just scratched the surface and recommend further research in this area. This could help the public sector to adapt and include social media more as a part of their innovation procedures. I also suggest more research about why the public sector doesn’t use social media to a greater extent in their innovation processes. I believe that such a study would contribute in discovering even more possibilities and challenges that the public sector has in regard to social media and innovation. Further research on how the public sector can use social media for innovation and why they don’t use it that much are needed.

6. Conclusions
The purpose of this study was to gain knowledge about the public sectors usage of social media for innovation. This by answering the research question: "How do the public sector use social media in their innovation process?" The public sectors adoptions of social media in their innovation process are sporadically used. The study showed that they do involve users in innovation, but mainly through face-to-face meetings. Most often is this an initiative from the public sector, because they need citizen’s input on a particular problem or area that they already have identified. User involvement both through social media and face-to-face meetings are mainly used in the ideation phase of the innovation process. Since communication is a big source for user involved innovation in the public sector, should they be able to use social media more in their innovation process. However, the public sector should always use several methods to involve citizens in innovation, in regards to their democracy perspective.

My conclusion is that the public sector doesn’t use social media for innovation as mush as they could. Communication is the common denominator in both the innovation procedures and the social media usage within the public sector. I state that communication can be the road to innovation for the public sector.
References


Interview guide

Intro:
Shortly, tell me about your self and what your role in the municipality is? -
tasks, responsibility etc.

Municipality: organizational questions
What are the municipality's tasks?
What rules do you have to follow? Legislations, guidelines
What demands are there for you as a municipality?
What is the biggest difference between municipalities and other
organizations or companies?

Innovation:
What are the municipality's procedures to keep evolving and improving?
Strategy, provisions, demands
How do you seek new opportunities?
Why do you seek new opportunities?
How do you seek information or inspiration? business intelligence
Can you give examples of what kind of changes/improvements the
municipality has done recently?
Why?, How?, collaboration?

Social media:
How do the municipality use social media?
- How do you communicate with social media? (Firm to costumer,
costumer to firm, or both?)
- How involved are your company in discussions in social media? (Start
corversation, join in)
Do you have a social media strategy?
Why do you use social media? What’s the purpose? Main propose
What opportunities do you see whit using social media?
What risks do you see whit using social media?
What kind of social media do the municipality use? (twitter, linked-in,
Instagram, Facebook)
What would you want to improve in the municipality usage of social
media?
How can social media improve the municipality’s service to the citizens?
Are there any usage areas for social media that you have thought of but
haven't used? Why?
How do you think municipalities will work in the future with social media?
What would you like to see as the next step for Municipality A to use social
media?
Do you use social media to co-create with citizens?
Have the municipality used social media as a tool in the innovation process 
(to seek opportunities and ideas)?
Yes
- How have it been used?
- Why did you use social media?
No
- Have you thought about using it?
- Why haven't you used it?
Table over the respondents of the study

<table>
<thead>
<tr>
<th>Alias</th>
<th>Professional title</th>
<th>Interview type</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adam</td>
<td>Communication manager</td>
<td>Face-to-face interview</td>
<td>37.55</td>
</tr>
<tr>
<td>Bertil</td>
<td>Head of communication</td>
<td>Face-to-face interview</td>
<td>22.49</td>
</tr>
<tr>
<td>Cecilia</td>
<td>Society strategist with focus on democracy</td>
<td>Face-to-face interview</td>
<td>43.33</td>
</tr>
<tr>
<td>David</td>
<td>Webmaster &amp; Communicator</td>
<td>Face-to-face interview</td>
<td>40.00</td>
</tr>
<tr>
<td>Erika</td>
<td>Head of Unit for the Citizens' Office</td>
<td>Phone interview</td>
<td>23.51</td>
</tr>
</tbody>
</table>
Thematic map - Study of Municipality A:s Facebook page
Appendix 4: Thematic map (updated version) - Interviews

Thematic map (updated version) - Interviews

[Diagram showing various themes and their interconnections, including Social Media, Municipality, Innovation, Dialogue, and Management.]