# UNIVERSITETET I OSLO

Masteroppgave

# How the nature of ESM influence knowledge sharing

A study of Norwegian consultants' knowledge sharing behaviour from an affordance perspective

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#### **Abstract**

This study explores the role of technological affordances of enterprise social media (ESM) in altering the amount of knowledge shared by employees. Understanding how the technological affordances of ESM come into play is important for organisations to succeed with knowledge sharing, and thus gain competitive advantages. This was investigated through 21 qualitative interviews with consultants from 10 different consulting companies. Based on a preliminary study, we became aware of how knowledge intensive firms often struggle to get their employees to share knowledge.

Based on literature in the research field, we found a relatively new perspective that looks at how technological affordances may influence organisational processes such as knowledge sharing behaviour. This approach emphasises the intersection between the technology and the user, focusing on how the technology may be perceived in various ways (Rice et al., 2017). Our analysis examines how technological affordances of ESM may influence employee's knowledge sharing behaviour. More specifically, we look at how employees perceive opportunities and limitations that ESM may afford. We found that the following technological affordances of ESM both increased and decreased knowledge sharing behaviour: visibility, association, editability, persistence, metavoicing, notified attention, and selectivity. Our findings suggest that employees may increase their knowledge sharing behaviour based on expectations of professional and reputational benefits, actively using selfpromotion as a strategy for achieving those benefits. Additionally, we found that receiving support from colleagues and valuable help motivated employees to share knowledge in ESM. We found that employees may decrease their knowledge sharing based on fear of their contributions being irrelevant and of insufficient quality. Large amounts of irrelevant information on ESM, in addition to disturbing notifications, were also found to inhibit active engagement on ESM.

Our findings provide a better understanding of how ESM affordances influence employees' knowledge sharing behaviour, more specifically how their motivation and self-efficacy affect this behaviour. Insights from this study can contribute to the field of knowledge management by giving organisations tools for encouraging knowledge sharing amongst their employees.

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#### 1.0 Introduction

#### 1.1 Topic and Background

In this study we explore digital knowledge sharing behaviour amongst Norwegian consultants. Knowledge sharing is an important organisational activity, where the goal is for organisational members to learn from each other (Reus et al., 2022). Knowledge sharing thereby develops the organisation and ultimately contributes to its competitive advantage (Wang et al., 2014). Consulting companies make a living by advising and selling their competence to clients, thus the core product provided by consulting companies is knowledge itself (Alvesson, 1993). Knowledge sharing is therefore considered essential for consultants' ability to solve clients' challenges (McQueen, 1998).

To facilitate employees' knowledge sharing (Sun et al., 2022), many organisations have implemented enterprise social media (ESM) (Rode, 2016). ESM is a form of information and communication technology (ICT) that have generated new ways of sharing knowledge within organisations (Razmerita et al., 2016), through altering how employees create, modify, transfer, and store knowledge (Jarrahi & Eshraghi, 2019). ESM are characterised by an emulation of social networking sites in both functions and look (Leonardi et al., 2013), with the possibility to share messages, photos, and activity streams (Kim et al., 2010). ESM are valued for improving the knowledge flow (Allam et al., 2020), as well as providing multiple opportunities for social interaction and collaboration (Rode, 2016).

Even though ESM facilitate content sharing between colleagues (Leonardi, 2014), organisations struggle to make their employees voluntarily contribute with knowledge (Sun et al., 2022; Virkar et al, 2019). While some users actively produce content, others mainly observe and do not contribute with content, resulting in unbalanced activity (Stray et al., 2019). For organisations to understand what causes this lack of participation, it is necessary to identify factors that affect employees' knowledge sharing behaviour. Feedback and recognition have for instance been found to influence people's intentions to use ESM platforms (Cheikh-Ammar & Barki, 2014), and may therefore be a motivational source for knowledge sharing. Employees' intention to share knowledge is considered one of the most essential preconditions for the success of ESM (Bock et al., 2005). One way to investigate this is to look at which factors cause employees to both increase and decrease their knowledge sharing behaviour.

Recent years, a young research field have emerged, investigating how technological affordances of ESM may influence organisational processes like knowledge sharing (Treem & Leonardi, 2013). Affordances refer to the actual and perceived properties of a technology, including those features and functions that allow for different usages (Salomon, 1993). When engaging in discussion and sharing knowledge on ESM, all your posts, comments and reactions become and remain visible to all (or some) of the members of the platform (Leonardi et al., 2013). This allows employees to become more aware of who knows what in the organisation, which may increase the knowledge flow and improve collaboration amongst employees (Leonardi, 2014). Some argue that we are entering an era of "hypervisibility", where the norm is that everyone can see what any other person says or does at any time, and to whom (Keen, 2012). This may also lead to an increased fear of being judged, including fear of feedback and criticism, as well as fear of losing face (Razmerita et al., 2016). Affordances of ESM usage may in other words affect employees' willingness to share knowledge. Few studies have looked at how the consequences of social media usage in organisations affect processes like knowledge sharing, and this is not yet well understood (Treem & Leonardi, 2013). Our aim is therefore to highlight how affordances of enterprise social media usage in consultancy companies influence the knowledge sharing behaviour of employees.

#### 1.2 The Research Question

When applying an affordance approach, scholars consider how the relationship between the technology and its users unfolds, to understand in what various ways the users may adopt and use the technology (Rice et al., 2017). In this study we seek to identify how affordances of ESM may both facilitate and inhibit knowledge sharing behaviour, thereby respectively increasing, and decreasing the activity in the ESM. On this background, we have developed the following research question:

How do affordances of enterprise social media (ESM) influence the knowledge sharing behaviour of employees in consulting companies?

We look at how the specific affordances of ESM may be associated with organisational outcomes in the form of knowledge sharing. By identifying how features of ESM can increase knowledge sharing behaviour, we aim at contributing with insight that may help managers successfully integrate ESM at their company, encouraging users to actively participate. By identifying how ESM may decrease knowledge sharing, managers can gain

insight that can be used for the removal of barriers, as a means of increasing knowledge sharing amongst employees.

# 1.3 The Structure of This Paper

The remainder of this thesis is as follows. The second chapter explains the theoretical foundation for this thesis by looking at the importance of knowledge sharing in consultancy companies and detailing perspective explaining knowledge sharing behaviour. We introduce the concept of ESM and present a theoretical framework for its technological affordances and how they influence knowledge sharing behaviour, namely individuals' motivation and self-efficacy. Further on, the third chapter outlines our research method, followed by a presentation of our findings in the fourth chapter. In the fifth chapter we discuss our findings in light of theory previous research. Finally, the last chapter ends with a summary and concluding remarks followed by practical implications of the study and suggestions for future studies.

#### 2.0 Theory

In this chapter we will explain the theoretical framework used in this study. First, an introduction to the concept of knowledge sharing is given, together with an explanation of various definitions of knowledge. We will explain characteristics of consulting companies and describe why such companies are dependent on knowledge sharing. We further provide an account of ESM as a knowledge management system, highlighting how lack of participation is considered challenging to organisations. Finally, we present the technological affordances of ESM relevant to this study.

#### 2.1 Knowledge Sharing in Knowledge Intensive Enterprises

Knowledge sharing can be defined as "any activity that involves the exchange of information, skills and expertise between people or within and across organisations and institutions" (Virkar et al., 2019, p. 61). Sharing knowledge is a process involving the elements of knowledge being requested, provided, and received (Kang, 2016). The point is for the knowledge to be learned and applied by the receiver (Ma & Chan, 2014). Knowledge sharing is a component of the broader research field of *knowledge management*, describing the process where organisational knowledge is captured, shared, and effectively used (Girard & Girard, 2015). Some view knowledge sharing as the most important factor of successful knowledge management (Abu-Rumman, 2021). According to Davenport and Prusak (1998), knowledge management projects aim at encouraging knowledge sharing behaviour and showing the important role of knowledge in the organisation. Considering the broader context of knowledge management, the core of knowledge sharing is that an individual's knowledge is made available to the wider organisation, in a way that it can be understood and used by others (Virkar et al., 2019).

Knowledge is often referred to as intellectual capital and is seen as critical to a company (Sarvary, 1999). Knowledge sharing is valuable to the organisation because it creates new knowledge as a result of exchanging and developing knowledge that already exists within the organisation (Razmerita et al., 2016). Using internal knowledge-resources is important for knowledge-intensive enterprises, such as consulting companies, because it serves as a source of sustainable competitive advantage (Rode, 2016). In the consulting industry, the core selling product is knowledge itself (Sarvary, 1999). Consultants are working on knowledge-intense problems of high complexity, with a need for collaboration and expert competence (Dittes & Smolnik, 2019). Demands from the clients are extensive, as they want to benefit from consulting companies' broad experience (Sarvary, 1999). Such

companies must therefore be able to synthesise a large amount of knowledge from their employees' experiences, creating a knowledge base which clients can take advantage of (Sarvary, 1999). This knowledge base is built through making employees share knowledge with each other, transforming personal knowledge to organisational knowledge (Sun et al., 2022; Szilágyi, 2017).

To better understand knowledge sharing as an activity and what it entails for an organisation, it is relevant to look at different definitions and understandings of the term knowledge. Traditionally, in the field of information theory, knowledge was distinguished by its place on a hierarchy, where data were placed at the bottom, followed by information, then knowledge, surpassed by wisdom at the top (McInerney, 2002). McInterney (2002) explains knowledge as the awareness of what an individual, through study, experience, reasoning, or association, knows. Alavi and Leidner (2001, p. 109) describe knowledge as information "possessed in the mind of individuals". McQueen (1998) has a different understanding of the term, describing knowledge as the result of information being combined with internal beliefs and experiences, resulting in the individual being able to give suggestions or advice. In line with these definitions, we believe that knowledge is a result of information, experiences, and individual ideas, which can ultimately become useful in the performance of organisational tasks.

#### 2.1.2 Knowledge Sharing Behaviour

Scholars argue that the two concepts motivation and self-efficacy play important roles in knowledge sharing. According to social cognitive theory, an individual will act in a certain way based on the two elements *outcome expectations* and *self-efficacy* (Bandura, 1986). The concept of outcome expectations is related to motivation, consisting of intrinsic and extrinsic rewards (Hsu et al., 2007). To be motivated means to be "moved to do something", meaning that when a person feels inspired to act, the person is motivated (Ryan & Deci, 2000, p. 54). Research have assumed that people engage and persist in behaviour to the extent that it leads to a desired goal (Ryan & Deci, 2000). Literature on motivation separate such goals or rewards as being of intrinsic or extrinsic character (Hsu et al., 2007). When a person is driven by enjoyment of the task itself, the motivation is *intrinsic* (Ryan & Deci, 2000). People who are intrinsically motivated will share knowledge regardless of whether they get something in return (Osterloh & Frey, 2000), due to the pure enjoyment of helping others. When you do something because it will lead you to a goal or desirable outcome, you are *extrinsically* motivated (Ryan & Deci, 2000). A good example of extrinsic benefits that may motivate

individuals to share knowledge are monetary rewards and career achievements (Razmerita el al., 2016). Reciprocal benefits have also been identified as a driver to employees' knowledge sharing behaviour, with the *norm of reciprocity* requiring people to give back or return benefits in exchange for benefits they have received themselves (Gouldner, 1960). This reciprocity doesn't necessarily have to be between the parties directly involved in the exchange, but of the principle: "I help you, and you help someone else" (Baker & Bulkley, 2014, p. 1493), known as *general reciprocity*. Osterloh and Frey (2000) argued that sharing knowledge is intimately connected to motivation and that an organisation is dependent upon motivation management to gain competitive advantages based on knowledge sharing.

Although motivation is an important predictor of knowledge sharing behaviour, motivation alone is not sufficient for explaining individual behaviour (Yee et al., 2021). The concept of self-efficacy refers to a self-evaluation that influence what behaviours individuals will perform, and that also affects how much effort one puts into the behaviours (Hsu et al., 2007). During interactions with the environment, a person's beliefs about his or her ability to perform the given task will greatly influence thought patterns and emotional responses (Pai & Tsai, 2016). A person's self-efficacy is shaped by past experiences (Bandura, 1997), and might thus affect motivation to exert the behaviour in the future. When people don't feel they have the right capability for an activity, there will be a lack of motivation to exert this activity (Legault, 2017) and the general tendency is that people avoid activities they believe are beyond their abilities (Pai & Tsai, 2016). On the contrary, when people consider themselves capable of handling certain tasks, they take on these with confidence (Pai & Tsai, 2016). Pai and Tsai (2016) found that, despite members' willingness to share knowledge, actual sharing behaviour was primarily regulated by the individual's self-efficacy. They thereby argued that self-efficacy was a moderating effect of knowledge sharing behaviour. In the context of knowledge sharing in ESM, self-efficacy deals with employees' perception of their own ability and capacity to share valuable knowledge with others and thereby contribute with content (Yee et al., 2021).

#### 2.2 Enterprise Social Media (ESM)

Over the last decade, facilitating tools for collaboration, communication and knowledge sharing amongst employees, known as enterprise social media (ESM) have been introduced in knowledge-intensive firms like consultancies (Leonardi et al., 2013). ESM are a type of knowledge management system, which is a technology supported information system allowing for transfer and distribution of knowledge between employees (Wang et al., 2014).

There exists a variety of terminologies on the field, and a common definition for what we call ESM is lacking (Högberg, 2018), reflecting how this is a young research field still under development (Wehner et al., 2017). In this study, we will stick to the term enterprise social media (ESM), as that is what we have observed as most prominent in existing research. Leonardi et al. (2013, p. 2) characterises ESM as: "web-based platforms that allow workers to (1) communicate messages with specific co-workers or broadcast messages to everyone in the organisation; (2) explicitly indicate or implicitly reveal particular co-workers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited, and sorted by anyone else in the organisation at any time of their choosing". Typically, ESM provide functions like instant messaging (chat), asynchronous messaging like email, conference calls between team members, contributing or accessing to shared documents in a document repository such as SharePoint, and planning or scheduling tools (Gibson et al., 2022). However, ESM are not only simple containers for storing knowledge, and may be used as stages where employees can show their expertise, using it strategically to manage others' impressions of them (Leonardi & Treem, 2012).

ESM are inspired by social networking sites like Facebook (Allam et al., 2020), but where general social media is open to the public, ESM are only available to the members of the organisation (Stray et al., 2019). ESM bring together functions of multiple social media and allows users to use it for both work-related and non-work-related purposes (Sun et al., 2021). Where workplace communication has traditionally taken place in physical places like offices, conference rooms and hallways (Leonardi, et al., 2013), a substantial part of this interaction is now digital, and technology-based environments are the new norm (Virkar et al., 2019). New technologies provide the possibility of communicating across space and time (Virkar et al., 2019), and ESM are valued for improving the knowledge flow (Allam et al., 2020). ESM facilitate communication of different forms like written text, pictures, videos, and symbols like thumbs-up (Cheikh-Ammar, 2014), and users can express emotions by using emojis (Stray et al., 2019). As in social networking sites, ESM allow for tagging, linking, networking, and searching for information (McAfee, 2006). Creating and consuming content is the most basic type of investment in online groups, such as ESM (Butler et al., 2002). Examples of ESM commonly used in organisations to encourage knowledge sharing are Yammer, Slack, and Jive (Danielewicz-Betz, 2021).

Receiving feedback, for instance through "likes" on your posts, can boost individual self-esteem, which can thus encourage more knowledge sharing (Cheikh-Ammar, 2014). People may experience and perceive a "like" differently (Faraj & Azad, 2012), and how individuals experience feedback play a central role in their intention to continue to participate in social networks (Cheikh-Ammar, 2014). Feedback can be perceived as acts of acceptance from other members of the platform, or reflect an individual's reputation (Kietzmann et al., 2011). Anticipated gains in reputation could lead to increased knowledge sharing (Rode, 2016). Some scholars argue that employees use ESM as a tool for strategically managing others' impressions and improving one's status through self-promotion (Lee, 2020). With the introduction of ESM, firms try to reduce prevailing technological, organisational, and individual barriers of knowledge-sharing, as ESM promise to improve the process of identifying, capturing, and exploiting existing knowledge (Fulk & Yuan, 2013; Noe et al., 2014). Through increasing knowledge sharing, ESM are said to enhance employees' work performance and the company's competitiveness (Archer-Brown & Kietzmann, 2018). Still, the implications of ESM as a technology for organisational knowledge sharing is not yet well understood by researchers (Treem & Leonardi, 2013). Research on ESM has traditionally focused on the positive aspects to knowledge sharing (Berraies & Irum, 2021; Chen et al., 2020).

#### 2.2.1 ESM's Main Challenge: Supply of Knowledge

Although ESM are associated with content contributions, many employees never contribute actively to online communities themselves (Treem & Leonardi, 2013), and one of the main challenges organisations face today is the supply of knowledge (Chiu et al., 2011). Many organisations fail to encourage their employees to actively share knowledge in the company's ESM (Sun et al., 2022; Virkar et al., 2019). Given the popularity of social media, employees are expected to have a quick adoption of ESMs, followed by an active use (McAfee, 2009). Despite this expectation, it is estimated that in online communities, most members (about 90%) only read and consume content, 9% react, edit or comment, while as little as 1% actively create new content (Giermindl et al., 2017). In their study, Stray et al. (2019) found that the majority of content published on a platform was made by a small group of contributors, highlighting how participation in ESM is not equal. Low activity is a general problem when introdugiercing new knowledge management systems in organisations (e.g., Loonam et al., 2014), as employees often have a resistance to change and prefer their previous systems and ways (McAfee, 2009). User-generated content is the basic requirement

for retrieving content by colleagues, as it shapes the foundation for social interactions (Rode, 2016). In other words, employees must contribute with their knowledge actively, for ESM to facilitate learning and better collaboration (Rode, 2016). Although ESM provide the option of communicating more visibly, usage is primarily characterised by an extensive use of direct messages (Stray et al., 2019), which thus leads to the content not being available to everyone. When employees don't exploit the full potential of ESM and contribute with valuable content, the organisation will suffer from a cost-intensive failure, not being able to gain from organisational learning and potential competitive advantages (Huang et al., 2003).

When investigating factors that influence knowledge sharing, scholars frequently distinguish between organisational, technological, and individual factors (Laitinen & Sivunen, 2021; Razmerita et al., 2016). Researchers have identified several factors that are important to knowledge sharing behaviour, such as organisational culture (Lee & Choi, 2003), monetary resources (Hinds & Pfeffer, 2003), motivation (Razmerita et al., 2016), and technological usability (Razmerita et al., 2016). However, research on factors that may influence active participation in ESM is scarce (Rode, 2016). Previous studies have also tended to investigate the organisational and technological factors rather than looking at the individual factors that shape the employees' intentions and attitudes toward sharing knowledge (Berraies & Irum, 2021; Foss et al., 2010). From the individual perspective, knowledge sharing behaviour is largely predicted by employees' knowledge sharing intention, which is influenced by motivation (Zhang et al., 2020). It is found that an employee's willingness to share knowledge is essential for the success of knowledge sharing, (Bock et al., 2005), and will likely influence both the frequency and quality of the contributions of knowledge in ESM (Richter et al., 2011). Research have looked at the usage of public social media like Facebook, but little is known about the drivers to active social media usage in enterprises (Rode, 2016). Few studies have also applied a social psychological perspective by looking at the motivation for knowledge sharing in ESM (Sun et al., 2022). Individuals' motivations for ESM behaviour are complex (Lee, 2020), and researchers have called for dedicated and extensive research on this field (Wattal et al., 2010). This study will focus on the intersection between technology and its users. We look at how behavioural factors like motivation and self-efficacy are influenced by individuals' perception and usage of ESM. More specifically, our study will analyse how the technological affordances of ESM influence employees' knowledge sharing behaviour.

#### 2.3 Technological Affordances of ESM

The concept of affordances has been increasingly applied as a framework for understanding ESM usage and its implications (Rice et al., 2017). "Affordance refers to the perceived and actual properties of a thing, primarily those functional properties that determine just how the thing could possibly be used", (Salomon, 1993, p. 51). Affordances are in other words possible ways that an actor may perceive and use an object, to achieve a specific purpose (Treem & Leonardi, 2013), and are distinguished from function and feature. For instance, email provides the *function* of sending a message, and the *feature* of marking a message as urgent (Gibson et al., 2022). The features of the ESM make certain actions possible, but affordances refer to whether individuals perceive that the technology allows them to do those actions (Flyverborn et al., 2016). Unlike the features of an object that exists independently of the people who use them, the affordances are not similar for each person who encounters them (Treem & Leonardi, 2013). How individuals perceive the technological affordances of ESM may alter the way knowledge sharing occurs in an organisation (Treem & Leonardi, 2013). An affordance lens can help us understand how the same technology can be both helpful and harmful (Gibson et al., 2022). "An affordance can have both positive and negative, intended and unintended, and short- and long-term connotations; it may both enable and constrain action" (Rice et al., 2017, p. 108).

ESM provide a range of affordances that make them distinct from other knowledge management systems commonly used for collaboration and communication (McFarland & Ployhart, 2015; Treem & Leonardi, 2013). Previous research has proposed a variety of affordances for knowledge sharing in ESM (Sun et al., 2019). The technological affordance perspective has successfully been used in studies of how organisations have been shaped by ESM, and it has been found to be a fitting framework (Laitinen & Sivunen, 2021). According to Rice et al. (2017) however, research lacks a proper operationalisation of affordances, thus making it difficult to look for and compare studies. Several studies, like the ones by Oostervink et al. (2016) and Sun et al. (2019) have tried to collect and compare common technological affordances of ESM. In this study, we will present affordances that are relevant to the specific act of sharing knowledge, hence avoiding addressing affordances related to the processes of finding and using knowledge, which are the two other aspects of Girard and Girard's (2015) definition of knowledge management.

*Visibility* has been argued to be the most characteristic affordance of ESM (Leonardi et al., 2013; Oostervink, 2016), even being described as a root affordance, fundamental in

making the other affordances possible (Flyverbom et al., 2016). The visibility affordance makes everyday conversations and formerly invisible communication amongst colleagues visible to other members of the organisation (Allam et al., 2020; Treem & Leonardi, 2013). Whether it's through comments, posts, status updates, votes, connections, revisions or photos, contributions to ESM are visible for everyone who has access to the system or the group where the activity takes place (Treem & Leonardi, 2013). This contrasts with traditional workplace communication like e-mail and telephone, where channels are "capsuled" and not visible to others than the involved parties (Leonardi, 2014). The open nature of ESM can make employees consider potential risks with sharing knowledge of personal, confidential, or sensitive character (Gibbs et al., 2013), and assumed risks can influence employee's decision to share knowledge on ESM (Laitinen & Sivunen, 2021). Previous research has found the affordance of visibility as both a facilitator and inhibitor to knowledge sharing behaviour on ESM (Laitinen & Sivunen, 2021).

When sharing knowledge on ESM, employees may craft and recraft content before it gets posted and viewed by others, thereby affording *editability* (Treem & Leonardi, 2013). Employees may also revise or modify content they have already published, like correcting a spelling error or deleting the entire post (Rice et al., 2017; Treem & Leonardi, 2013). As opposed to oral communication, users have more control over what is perceived and how they present themselves with written communication, as they can spend time formulating a strategic message (Razmerita et al., 2016). Treem and Leonardi (2013) argued that the editability affordance allows for a regulation of personal expression, as employees can strategically manipulate in what way information is shared with others. In this way the employees gain greater control of how the knowledge is viewed by others, by providing information targeted for a specific audience, such as managers (Treem & Leonardi, 2013).

Persistence is another affordance of ESM, allowing users to view past contributions (Oostervink et al., 2016). When social interactions on ESM persist over time, content can be traced, revealing both the initial request and the other knowledge contributors (Rode, 2016). Having a record of previous communication may help gain a better understanding of the content, as the information is properly contextualised (Gergle et al., 2004). When the knowledge contributor logs out of the system, the information remains accessible to other users without disappearing, unless it is deleted (Oostervink et al., 2016). The persistence of content in ESM can result in knowledge contributions making more noise than value (Treem

& Leonardi, 2013), and employees getting overwhelmed by information overload (Sun et al., 2021).

The ability to see both the connection between individuals and the connection between individuals and content, is an affordance of *association* (Treem & Leonardi, 2013). The association affordance allows individuals "to connect people with people, content with content and people with content" (Sun et al., 2019, p. 236). These connections let members of an organisation know *who knows whom* and *who knows what* (Leonardi, 2014). This allows for information to easily be traced back to the knowledge provider and from which team and department this person belongs (Heymann et al., 2020). Knowledge about the employee's background and what they know, is referred to as *metaknowledge* (Treem & Leonardi, 2013). Users' possibility of seeing others' connections beyond one's own is also referred to as *network-informed associating* (Majchrzak, 2013). This affordance entails that new connections can be made more easily between people who do not know each other personally (Oostervink et al., 2016, Sun et al., 2019). The association affordance has been found to enable knowledge sharing in ESM (Brzozowski, 2009).

ESM afford users to receive notifications when there are updates like new comments or posts, which has been described as the affordance of *notified attention* (Oostervink et al., 2016), thus facilitating real-time communication amongst employees. The same affordance has been labelled as *triggered attending*, describing how ESM give users the possibility to only pay attention to content when they receive notifications, and otherwise remain uninvolved in producing content or participating in conversations of interest (Majchrzak et al., 2013; Oostervink et al., 2016). This affordance is a way for users to disengage from the time-consuming continuous stream of content (Gibbs et al., 2013). Notifications allow users to become aware of content published by others and reacting to this content is captured by the *metavoicing* affordance, which describes the possibility to engage in ongoing knowledge conversations by reacting to others' presence, profiles, content, and activities (Majchrzak et al., 2013). *Selectivity* is a related affordance identified by Gibbs et al. (2013), describing how ESM provide the opportunity to subscribe to a specific person, group, or other source of information, and in that way affording selectivity.

#### 2.3.1 Previous Research

Studies have shown that affordances of ESM can both promote and inhibit knowledge sharing (Leonardi et al., 2013; Rice et al., 2017; Sun et al., 2019). However, previous

research has tended to overestimate the positive effects that ESM have on knowledge sharing (Gibbs et al., 2013). Scholars argue that the negative effects have not been sufficiently researched and state that affordances of ESM may also inhibit knowledge sharing (Berraies & Irum, 2021; Gibbs et al., 2013). Based on theory and previous research, we aim at analysing how the technological affordances of ESM can both facilitate and limit knowledge sharing behaviour.

#### 2.4 Summary

Taken together, existing theory and research suggests that knowledge sharing behaviour is likely shaped by one's motivation and self-efficacy. To examine this possibility, we investigate the issue of poor participation within the organisational context of enterprise social media (ESM). As we have argued, ESM provides affordances and communicative possibilities that can affect motivation and self-efficacy, and thus knowledge sharing behaviour. Our aim is therefore to analyse how the technological affordances of ESM shape knowledge sharing behaviour, thus contributing to our collective understand of the effects of technology on knowledge sharing amongst consultants.

#### 3.0 Method

Our aim with the study was gaining better insight into the topic, looking at different people's perspectives and understandings of knowledge sharing. The data was mainly collected through qualitative interviews as that is the most appropriate method when trying to gain a deep, comprehensive understanding of a concept (Bergin, 2018). The research question fits an epistemological stance, addressing theories and understandings of the phenomenon (Saldaña & Omasta, 2016). To this aim, we, as researchers put on an interpretivist hat, placing emphasis on the fact that our interpretations of the world are shaped by our experiences and the society we live in (Bergin, 2018). Through data analysis we will uncover different perceptions of reality (Bergin, 2018). The data will hopefully give us insight into how technological affordances of ESM influence employees' knowledge sharing behaviour.

# 3.1 Sample

The sample was collected from a population of Norwegian consultants consisting of 21 people, 10 men and 11 women, with almost half (48%) of the informants regarded as leaders, being titled as "manager" or higher. We mapped the informants' level of experience, regarding informants who had been employed for less than one year as *newly hired* (29%), informants who had been employed for less than or equal to five years as *somewhat* experienced (38%), and informants who had been employed for more than five years as experienced (33%). The recruitment of informants for the study started with a convenience sample of a few initial subjects from the researchers' own network, serving as "seeds". Further on the recruitment proceeded through network linkages of these "seeds", known as snowball sampling (Bergin, 2018). However, we tried to ensure that certain demographic groups were represented in the sample, like higher hierarchical position and gender.

We considered employees in consulting companies as fitting subjects for a study of this topic because consultants use ESM for knowledge sharing in their daily work to collaborate on knowledge-intense and complex problems (Dittes & Smolnik, 2019). The consultants we interviewed in this study work within a variation of subject areas, including information technology and management consulting. The informants work for the following organisations: Accenture, AFF, Avo Consulting, Bouvet, Capgemini, Deloitte, KPMG, Orange Cyberdefense, Rambøll Management Consulting and Sopra Steria. Most of these organisations are large and of a national and global scale. We therefore expected informants to be able to give us useful insight on the topic due to these organisations working with knowledge sharing on a strategic level.

#### 3.2 Data Collection

#### 3.2.1 Semi-Structured Interview

All interviews were conducted digitally, through either Zoom or Microsoft Teams, and lasted for about one hour. The interviews were semi-structured directed by a predetermined list of questions intended to be covered. When conducting this interview method, the interview-guide is built in a well-organised sequence, with topics following each other (Hermanowicz, 2002). However, our interview guide did not constrain exploration of unexpected topics in greater depth during the interview (Bergin, 2018). We were aware of not over-managing the interviews, but a certain structure was necessary to cover the topic, as opposed to a completely unstructured interview (Fontana & Frey, 1994). The interview-guide consisted of 32 questions (see Appendix A), excluding probes. We tested our interview guide through a pilot interview before the collection of data, helping us to assess if our questions could capture those aspects of knowledge sharing most central to our interests.

The interview guide was designed in an early phase of the project, mainly exploring factors that motivate employees to participate in digital knowledge sharing. After conducting a few interviews, we quickly became aware of the importance of visibility, and therefore included questions about that in the interview guide. We continuously revised the interview guide, adjusting the questions consecutively after each interview during the whole period of interviews. Refining the questions, changing their order, and removing some questions, using experiences from the interviews to make sure questions were asked in a way that the informants could understand, as well as having logical transitions between topics. Follow-up questions were predefined, but during the interviews more directive probes were asked to ensure a common understanding. The interview-questions were open-ended, facilitating an open and exploratory approach, to avoid putting words in the informants' mouths (Bergin, 2018). Follow-up questions allowed for more direct questions such as confirmations, clarifications, or explanations. This dynamic approach led to the development of more accurate questions throughout the interview process, by gaining initial insight into the topic after talking to the first informants. Changes were most extensive in the first half of our series of interviews and increased the construct validity of the study. It was not until after the data collection was finished that we became aware of the affordance approach, and that this perspective would be fitting for analysing our data material to explore knowledge sharing behaviour in ESM.

When creating the interview guide, we designed many of the questions to be about motivation, based on previous research stating that employee's willingness to share knowledge is considered one of the most essential preconditions for the success of ESM (Bock et al., 2005). Although the topic of motivation was investigated, we did not mention the exact word "motivation" in any of the questions. This was because we did not want to shape the participants' answers, nor limit them. Prior to interviewing, self-efficacy was not a topic we had planned to cover. During the interviews, we became aware that several informants doubted their ability to contribute with knowledge in ESM., and thus self-efficacy emerged as a relevant theme. We did not ask directly about it, but many informants talked about issues related to self-efficacy when asked about reasons for not sharing knowledge.

We wanted to structure our interviews in a way that created a comfortable atmosphere for the informant. Following the advice of Hermanowicz (2002), we began each interview with introductory questions to warm up, placing more difficult questions in the middle of the interview, while trying to end on an easier note with less demanding questions, allowing the informant to cool down. Had the topic matter of the interviews been more sensitive, this would probably have been of greater importance. We noticed that most of our informants were quickly comfortable and used to talking, and thus barely needed introductory questions to warm up. Because of this, we gradually reduced the time spent on introductory questions throughout the interview process, to ensure enough room for more essential questions.

Additionally, each interview was led by one of the researchers, while the other student primarily took notes and ensured that relevant areas in the interview guide were covered, as well as asking follow-up questions related to emerging topics. The "co-pilot" was also responsible for backup-recording the interviews through the encrypted app provided by our university, UiO Diktafon. Only once did we experience trouble with recording through our main solutions, Zoom and Microsoft Teams, and after this we always carried out a backup-recording. For the occasion mentioned, we only had an auto-transcription and no audio track. Luckily, we noticed immediately and were able to go through the auto-transcription straight away for corrections while the interview was still fresh in mind.

# 3.2.2 Quantitative Survey

To save time during the interviews and to gain better insight before meeting our informants, we obtained information on background variables through an online form (see Appendix B). The form consisted of eight items including name, organisation, job title,

education, seniority, which ESM the organisation use, and finally a self-evaluation of their own digital competence using a Likert scale. The form was handed out in advance of each interview, and 17 out of 21 informants filled it in, a completion rate of 81%. Obtaining background information from this form in advance allowed us to move faster in depth during the interviews. Some of the items worked as a guidance and starting point for the interviews.

Informants were informed about the length of the form in advance, which took approximately 3 minutes to fill out. The measurement of digital competence did not give much variance, as all informants assessed their own competence as "good" or "very good". In terms of position, the informants were evenly distributed with around half being titled "consultant", and the other half titled "manager or higher" (see Appendix C). In terms of what ESM our informants' organisations use, Microsoft Teams, SharePoint, Slack and Yammer were represented several times, while a variety of other platforms like Miro, Workplace and Skype for Business were mentioned by a few informants. In an initial phase we considered including a self-evaluation of which platform the informant uses the most. Eventually we decided this would be more fitting to uncover while speaking about the respective platforms during the interviews, with better opportunity of contextual explanations. We wanted to make the form as short as possible to achieve a satisfactory response rate, and the item was therefore removed. At an early stage, we considered running a more extensive qualitative survey as part of the project. However, considering the timeframe (only one semester) and scope of the thesis (30 credits) we considered this as too comprehensive as such surveys can be tricky to administer.

#### 3.2.3 Data Processing

Recordings were turned into interview transcripts using Microsoft Word's function of auto-transcribing audio files, which were then corrected and adjusted as required. All interviews were anonymised and consecutively transcribed by both researchers, transcribing approximately half each. Auto-transcribing worked best for standard Eastern Norwegian speech and not too fast speaking pace. Correcting the transcripts was no issue when having the possibility of listening to the audio files while reading and adjusting. Body language and other visual elements were not included in the transcript, as we did not see this as relevant when talking about knowledge sharing and use of ESM. However, elements like pauses, changes of volume, hesitations, and laughter were included. Interviews were conducted in Norwegian, but being that this thesis is written in English, all the quotes that has been used are translated. When choosing quotes it was important to stay true to the original quote,

keeping the content the same i.e., in accordance with the informant's original words. This sometimes entailed shuffling the order of the words for the sentences to make sense in translated form. We have been careful to use quotes in a thoughtful manner.

After transcribing the interviews, the coding process followed. There exist multiple methods for coding qualitative data, but the goal is categorising the data to discover underlying elements and themes (Bergin, 2018). It is possible to describe the coding process in divided steps or phases consisting of different levels of coding. However, most qualitative analysis does not follow such distinct, orderly stages (Bergin, 2018). We discussed our findings after each interview, so you can argue that the analytical process was already running at this stage, since we were continuously sorting and thinking about themes, links, and consequences during the coding process. Instead of being a straightforward process, qualitative analysis can often be cyclical, where multiple methods are carried out at the same time (Bergin, 2018).

The coding was carried out in the program NVivo, which is a *computer-assisted* qualitative data analysis software. NVivo worked as a tool for facilitating the analysis, allowing us to write memos, organise and arrange the data as well as searching for words or excerpts of the text connecting to the same code. Both researchers coded all the interview transcripts separately. This was to avoid overlooking important data and to ensure independence from each other's perceptions. We approached the coding process somewhat differently. Both were naturally shaped by having conducted all the interviews together, as well as having a theoretical overview from prior to the coding. However, one researcher mainly based the codes on theory and literature, predetermining categories and themes identified in previous, similar studies (for codebook, see Appendix D). The other researcher coded the transcriptions mainly based on their content (for codebook, see Appendix E). Examples of codes that we used were more general codes like *culture*, *visibility*, *expectations*, and challenges, as well as more specific codes like perception of one's own competence, benefits from others' knowledge, and codes for specific ESM the informants spoke about. Some codes were combined during the process, and some were split up. It is not unusual that researchers working together produce different codes when analysing the same piece of data separately, based on individual filters and lenses (Leavy, 2014). We therefore conducted a peer debrief after coding all the interview transcripts, where we assessed and compared both code sets, and discussed agreements and possible mistakes. This part of the coding process allowed for testing the trustworthiness of the coding and had the goal of increasing the intercoder-reliability of our analysis, in other words to which extent two different researchers agree on how to code the same content (Bergin, 2018).

Content analysis was used for this study since it is a fit method when looking for patterns in the data (Bergin, 2018). This analysis can be used on written interview transcripts, doing a comprehensive assessment of whether there are certain themes that appear more frequent, and whether certain words are used together (Bergin, 2018). In our analysis, we searched for insight and patterns in the interview transcripts, with a focus on meaning, interpretation, and nuance. There exist different approaches to content analysis, regarding how much interpretation the researchers should conduct (Bergin, 2018). In our analysis, we mainly looked for themes that were clearly stated by the informants. However, some deeper interpretations were conducted, especially when the informants talked about a topic indirectly. During the interviews, informants spoke about their uses of technology and their motivations for it, and they were usually not able to identify technological affordances in ESM themselves. As researchers, it is our job to apply affordance labels on the data, by analysing the respondents' varying motivations for use and non-use (Rice et al., 2017).

# 3.3 Delimitations, Limitations, Assumptions

#### 3.3.1 Delimitations

In the spring of 2022, the researchers carried out a student project, called "Prosjektforum", with the research question: "How is knowledge managed in knowledge organisations?". Through this project we gained insight in what a broad concept knowledge sharing is, and that it touches on several different topics. The initial aim for the current study was to dig deeper into the field of knowledge sharing. We initially limited the study to dealing with motivation for knowledge sharing. After a review of the literature, a further delimitation related to motivation for digital knowledge sharing followed. When looking at our data, we found that our data material on motivation was too narrow, so we decided to explore determinants from a behavioural point of view.

The qualitative research method is chosen based on which method will result in the most insight into the consultants' perspective on digital knowledge sharing. At the same time, with more resources, a quantitative survey could have enriched our findings, or even revealed other perspectives and patterns. A quantitative survey would also have given us the opportunity to identify confounding variables, and control for third variables affecting the motivation for digital knowledge sharing. The main aim of this study, on the other hand, was

to uncover different consultants' attitudes towards knowledge sharing, which makes more sense to primarily be investigated qualitatively, providing the possibility of contextual explanations.

#### 3.3.2 Limitations

One limitation of the study is that interviews could have been combined with actual records of contributions in ESM to be able to assess how knowledge sharing behaviour is influenced by ESM. This would have allowed us to gain insights in the actual usage of ESM. However, observation would not solely have covered this topic, and would only have been supplementing. Another limitation is that convenience and snowball sampling can affect the representativeness of the sample (Malterud et al., 2016). The fact that the study was based on 21 in-depth interviews implies that potential variations could affect the researchers' inferences about the population (Bergin, 2018). Known as sampling error, such variations are often inevitable, but sampling error can be minimised by increasing the sample size (Bergin, 2018). Malterud and her colleagues (2016) introduced the concept of "information power", as a guide for adequate sample size in qualitative interview studies. The idea is that the more relevant information the sample holds, the smaller number of participants is needed.

However, the sample size makes no opportunity of determining causal inferences, and discussions on how aspects are related are based on our reflections around the insights from our interviews. This does not necessarily mean that the findings are of less importance, but they illustrate conditions related to organisations similar to the sample, rather than concluding for a larger population. This study is considered to have a narrow study aim, which according to Malterud et al. (2016) does not require larger sample. In this study, the sample specificity is more sparse than dense, as consultants' professional fields and everyday working lives vary. Being that the sample consisted of consultants from different organisations with a variety of work tasks, there were individual and situational differences in their prerequisites, likely influencing the generalisability of the findings.

#### 3.3.3 Researcher as Instrument Statement

There is no avoiding that our own experiences will influence the research process. The knowledge-management project carried out last spring during "Prosjektforum" worked as a pre-study, shaping our understanding of the topic, and colouring our entry into and choices within this study. Within the interpretivist tradition, this is not necessarily problematic (Bergin, 2018). In fact, in qualitative research, researchers are considered an integral part of

the research process, and it is not always desirable nor possible to do a separation (Gadas, 2017, in Bergin, 2018). However, researcher bias is one of the most common criticisms of qualitative research, claiming that the results will be difficult to replicate as the research is too personal (Bergin, 2018). To increase the study's reliability, a rigorous, reflexive, and transparent approach was adopted.

#### 3.3.4 Assumptions

The population from which the sample is drawn includes consultants within a broad area of professional fields. Consultants are usually organised by projects, and even though the knowledge being shared is different, challenges that arise at consulting companies are regarded as applicable across the different professional fields. Although the study was not of a sensitive nature, we still believe that some of the informants may have had reasons for not giving completely truthful answers. For instance, a fear of unveiling your own insecurities, a struggle with giving socially undesirable answers, and a wish to present your organisation in a good light, might be reasons to twist the answers in another direction.

#### 3.4 Ethical Considerations

Prior to the project, as part of the preparations, we applied to Sikt (formerly NSD) for approval to carry out the project and correct handling of the collected data (see Appendix F). This is mandatory for student projects where data collection takes place. In addition, all participants were well informed about the study in advance, through an information letter (see Appendix G), and asked to consent before or in the beginning of the interviews. The informants' identities were anonymised so that their responses could not be tracked to their organisation. We asked for permission to disclose what organisations are represented in the study, to which all participants accepted. Anonymisation was decided in advance, to ensure participants would respond to our questions more freely. Whether this would have been necessary could be discussed, as the information we accessed was not of the highest sensitivity. One reason for anonymisation could be the interviews possibly giving us insight providing a competitive advantage. At the same time, it is unlikely that the informants would disclose sensitive information to two master students. Several informants implied that it would not have been a prerequisite for their participation, but it is not given that this would apply to all participants. As anonymisation was decided in advance, we kept to it.

#### 4.0 Findings

We will in this part of the thesis present findings from the interviews of the study. First, we will present the informants' views on knowledge and knowledge sharing, and how it is perceived as essential in their everyday work as consultants. Lack of supply of knowledge is the main challenge to ESM. We will present our informants' reflections upon the challenging aspects of ESM, identifying the reasons why they find it challenging to actively participate and share their knowledge. Furthermore, we will present the informants' thoughts on why one wants to share knowledge, and which factors are important for facilitating knowledge sharing in ESM.

#### 4.1 Knowledge is Valued

Knowledge was undoubtedly valued by our informants. When asked about the value of knowledge sharing or knowledge in general, for the informants themselves or for the overall organisation, a recurring stance was that it is of great importance. As one informant put it: "I think it is essential. It is actually part of the core of what we offer", elaborating: "I actually believe it is the whole key, alfa omega for our success", (Informant R). Another informant used the same metaphor: "It is our key. It is what we do for a living. If we did not have knowledge, we would not exist", (Informant T). Some talked about the value for them personally, and highlighted evolving through learning from others:

"I believe knowledge sharing is one of the most important things for me. Not that I share a lot myself, but I like to learn from others, and especially from the seniors in the firm, who have a lot of knowledge and experience. That is also very important in this profession, because everything changes all the time. Consultants are often pushed into projects in which, or not often, but sometimes consultants are placed in projects where they lack expertise. Because of this it is very nice to have knowledge sharing. To get into new fields and learn new things", (Informant L).

Although the value these informants speak about is somewhat intangible, it is possible to put a very real price on knowledge in consulting firms: "It is what we sell. So for us... What is inside our people's heads is what makes us a living", (Informant H). The service that clients pay for is the consultants' expertise, so developing the employees' knowledge is prioritised: "We spend an insane amount on all of these events and all the knowledge sharing that we do, so it is really supported by the management", (Informant A). Knowledge development was described as a costly initiative, but also as an investment for the

organisations. Informants explained that internal development is expensive for consulting firms, and that billable hours might constrain knowledge sharing: "Billing is a barrier. In itself it is a barrier... I just said there are no barriers, but billing is a barrier for all initiatives like that within a consultancy firm, where all hours are counted. Every internal initiative, initiatives that cannot be put on a project", (Informant J).

Increasing the knowledge and qualifications of its employees, and thus their value, is a priority for any organisation: "It is like the most important asset in our possession. After all, we sort of sell knowledge. So it is extremely important to us. We must constantly maintain, train and upskill, to stay attractive", (Informant G). Staying ahead in the field is essential for someone who sells their knowledge. Most of the informants described their organisations as attentive to the importance of knowledge sharing and focused on increasing it: "Our competence is our bread and butter, so we must stay up to date. It is... Technology evolves really fast, so we simply have to keep track", (Informant C). Several informants talked about the significance of ESM in the process of sharing knowledge digitally. One manager used this analogy when talking about the role of ESM: "They have become part of the toolbox, what you use on a daily basis. Much like a carpenter uses a hammer and a saw and such. It would be difficult to build a house without it, and it would be difficult to work in a knowledge-based company without it", (Informant H). ESM enables consultants to easily get in touch with each other when placed at a client's location: "Even for the customer, the feedback will be quicker for them as well, because I can post a post and get replies", (Informant P). If the consultant in question does not know how to solve an issue themselves, they can ask for help from their organisation, where someone might have the necessary experience or solution and is ready to help.

# 4.2 Limiting Aspects of ESM for Knowledge Sharing

A lack of knowledge contribution and participation has been described as the main challenge of ESM. To discover why this challenge is prevalent, it is relevant to explore the limiting aspects ESM has for knowledge sharing. In the next sub-chapters, we will present the most frequent reasons why our informants do not actively contribute to knowledge sharing in ESM.

#### 4.2.1 Reluctance to Expose Yourself to Large Audiences

With the main challenge in mind, we asked our informants to tell us about the general activity on their various platforms. We also asked our informants to think of reasons for not

sharing knowledge in ESM. Some informants described differences between groups and channels within the same ESM:

"It is perhaps the chat rooms where we have, for example, a departmental chat, that are in a sense used most actively. Here are daily clarifications, there are messages and more critical questions, where you don't know exactly who to ask. So there is a high activity level in those chats, and I think that is consistent for many others as well. Whereas in these Teams rooms, the channels, whatever we call it, it is highly variable. Some are used often, others are used very rarely, and perhaps the rooms that are the largest in relation to the number of people sitting in them are the ones that are used the least", (Informant J).

This informant further elaborated and linked differences in active participation to the amount of people eventually being able to see your contribution: "There will be a fairly high threshold for using a channel and entering your information if there are a lot of people who respond and see it", (Informant J). The same view was stressed by another informant: "The threshold for me personally to write where 5-600 people can read my message...that...I don't think I have done that", (Informant A). One informant described fear as a reason to hesitate to share something that will be visible to so many: "The post will be viewed by a lot of people. Or like everyone on Slack will get to see it. So that makes it kind of scary", (Informant P). Another informant described the same hesitance: "It can be somewhat harder to post something that 140 people will see. You feel that you must have a valid reason", (Informant N).

A newly hired consultant reflected: "I realise that if I have a question, I will go great lengths to find the information on the intranet and in Teams-channels before I eventually ask someone. And that rarely happens, I don't think I've ever asked in those public forums. I ask who I think might know directly", further elaborating: "You get your answer, but it probably would've been more effective to ask in a community forum. But then there's this threshold and barriers, not wanting to expose yourself to the whole company, sort of, put on the spot, that's stopping me from doing that", (Informant J). One informant described reluctance to ask in written form, comparing exposing oneself in the digital space to asking someone physically in the office: "It's almost as if I think it would've been easier to yell into the office: 'Does anyone have a slide on this?'. Almost wanted to say that I'm not that fond of that written yelling", (Informant N). Complexity of information was mentioned as a barrier

for sharing knowledge in ESM: "Noise and complexity. I think those are the two biggest barriers to succeed with knowledge sharing, digitally too. Because there is too much competing for your attention", (Informant F). Complexity of the problem you need help with might complicate asking colleagues through a written post:

"Sometimes think it can be a bit hard to explain. Because some things are very complex, and in those cases I feel like I need to speak, like it's not just a sentence I can write to explain it. And those times I find it easier to just take it with my desk mate than writing a post", (Informant P).

One informant described how their organisation has a dedicated group on Teams for sharing tips and tricks, as well as posts where people share insights. The informant states that they are reluctant to share in this group because of what they call "the LinkedIn vibe": "LinkedIn vibe is... A lot of people have a conception that LinkedIn is... (...) It's a bragging vibe. That you're showing off and display your achievements and stuff. And I think that makes many people hesitate to use LinkedIn", (Informant L). Another informant also used LinkedIn as an example of how ESM is used to show off and shape others' impressions oneself: "It's like everyone is having a blast all the time", explaining two sides of this: "As I see it, there is either people telling how clever they are, or how many people post that times have been tough for them lately, and that they have found a way out and so on. These channels have their own logic", (Informant U). Another informant had the same opinion: "I also react to that, when people try too hard come across as clever in discussions. Like: 'Look how great I am'. Yeah sure, you're not the first one, right?", (Informant F).

A recurring stance was that there is a high threshold for sharing something unsolicited, without being asked. Informants suggested sharing upon request would be more comfortable:

"Some might think: 'I can bring it up if someone asks'. Yeah, I don't know. It might be that posting something, cause most of the time people are asking, but to post something and be like: 'I figured out this thing and thought it could be good to know', that does not happen as often", (Informant P).

Several informants had the impression that much of the activity happen behind closed doors and in smaller groups: "I know that a lot of sharing happens in private channels. So if that was not the case, even more useful [knowledge] would have been put there [on the ESM]", (Informant N). One manager described the same difference for ways of asking for

help: "It is likely hierarchical. That the threshold for asking openly is higher that asking in a group chat", (Informant A).

Not knowing the answer to a question was stated as a reason for not replying to someone else's post: "I think I have posted like four times. So I'm not that active there. Like I do pay attention to what's going on, but in terms of answering and such, I haven't answered. Mostly because I don't know the answer myself", (Informant P). The visibility of ESM as arena seem to enhance individuals' uncertainty in the relevance and usefulness of their own knowledge: "It gets too public. Too big, because it sort of reaches the whole organisation. So I do not know, and I am not sure how relevant it really is, even if I think it is exciting, right?", (Informant L) reflected about sharing knowledge through posts on Teams. Another informant reasoned their inactivity in a similar manner:

"The reason that I'm not so active, well, it is not like I do it on purpose, but it's, well, I think that even if it is informal and chill and stuff, I still think there's a bit of pressure. Right, like: 'Is it a stupid question?', and such things. Stuff like that. It's in the back of your mind", (Informant P).

This might be because of the knowledgeable arenas that consultancies are: "Like, consulting firms are sort of the nerds' arena. But commercial nerds. So everyone that are here are professionally interested and curious", (Informant F). That brings us to a related subchapter describing how the public feeling of ESM in combination of working in a highly competent environment leads individuals to question their own knowledge.

#### 4.2.2 Questioning Your Own Knowledge

Too simple to ask for? A recurring theme in our interviews was how working in a skilled environment can lead to insecurity in one's own knowledge: "There is, in a sense, a fear that I will think that something completely simple and elementary is difficult", (Informant Q). The fear of sharing something obvious or something irrelevant to others, and especially to a large or public group, prevents people from sharing: "If I feel like I really should have known this, it is like, you announce to 100 people that: 'I do not know this'", (Informant N). This insecurity might become even more clear once it is written and broadcasted to the rest of the organisation. One informant reflected about it being connected to one's own perception: "Maybe it is more about my own...how I experience my own competence on that area, more than the platform itself", (Informant B). Poor thoughts about one's own knowledge can lead to fear: "There might also be a fear that no one will reply.

Like: 'That is such a stupid question that I will not even bother to spend time on it', sort of", (Informant Q). One informant elaborated how a personal sense of confidence is important when hiring consultants:

"Amongst the things we look for when hiring is that people are confident enough to, well to... If you're not confident at all, you'll never be happy in consulting business. So we tend to hire people with a certain profile, one of them being that they're professionally skilled of course, but also that they're professionally confident", (Informant F).

When seeing a question posted in the ESM, several informants described feeling uncertain about whether they were the fit candidate to reply, and that there would be others with more expertise: "I have felt confident about things, but I have never had the impression that I am necessarily the one you should ask about things. I have experienced that there are others one should rather ask", (Informant J). Some informants talked about the same insecurity for sharing knowledge:

"I often get into a dilemma when I am about to share something, or I want to share, but I am not sure whether it is right, or if I am the correct person to share. Because there is a senior that I suppose knows the topic better than I do. Do you know what I mean? (...) I might not share it, because in my opinion, they know it better", (Informant L).

This uncertainty might be more apparent with newly hired employees, who can especially feel insecure about their own knowledge: "Hmm, like you're new. At least I felt the first six months was a bit like: 'What is expected from me?', 'what questions are OK asking?', 'what is not alright?', and 'is this a relevant question?'", (Informant P). This was mentioned by a director as well, who stressed the importance of building the employees' self-confidence to create a lower threshold for participation in ESM:

"Often, the younger and the less experienced you are, the more you tend to think:

'This is not good enough, I have to work on it for one more day'. So we are concerned about ensuring them: 'Good enough!'. How simple can it be done? When you come from academia, nothing is ever good enough. You can write your master thesis for years. I did \*laughing\*", (Informant F).

Preventing bad behaviour in ESM was mentioned by another director as a way of encouraging employees' contributions:

"Something we work a lot on, because there is also, you can say there are also [Internet] trolls, because we do have them when we're this many. Someone who comment more critically on Slack. We work a lot on removing such things, so that people dare to share", (Informant T).

Not many informants talked about direct negative response, but lack of response on the other hand was something that recurred in several interviews, leading us to the next subchapter.

#### 4.2.3 Lack of Recognition and Response

Building employees' confidence in their own abilities is important for organisations working with knowledge sharing. Informants described reactions and response, as well as other types of recognition, from managers and peers as a way of encouraging employees: "People praise you and are really impressed, and give you feedback (...), like: 'This topic is so important. Good thing you brought it up'", (Informant C). Reactions can be of varying form and length: "There are a lot of likes, if people bother to take the time. It's often a thumbs-up", (Informant D). For most of our informants, simple reactions on their posts seem to be the standard way of recognising knowledge-sharing efforts: "The most common thing is that you only react with an emoji. So yes, someone might comment, but the most common thing is that you just acknowledge it, but only with like a heart, or something like that", (Informant L). Some informants did not really see the point of acknowledging people who share knowledge: "Like, it's so normal, so it would be sort of strange if someone is praised because of sharing knowledge", (Informant S). Others described how the lack of feedback or response can feel vulnerable to the person who has shared something.

"People are busy and have limited attention, so not everything gets a reaction. And that can of course feel vulnerable. 'Look at this nice thing that I have spent a lot of time on', and then there's no response. But in those cases, it's probably because people are busy somewhere else", (Informant F).

The informant explained it by how consultants are busy and that there is a lot of information to process. Not knowing the answer to a direct question can be another reason to leave it unanswered. When deciding whether to respond or not to a question that has been

posted, individuals' perception of their own knowledge and its usefulness, matter. Our informants described an evaluation of their potential contribution:

"If I have nothing to offer, I won't write anything, ref. noise. But if I wonder the same thing, I can give some sort of reaction that shows it. Or if it was something exciting, we can react in a way that shows that. If it's completely off my field, I usually let it go with no reaction", (Informant Q).

Direct questions will demand replies in a different way than unsolicited posts. Some informants talked about whether people get recognition for posting something depends on the type of post: "If you just share something like: 'Oh, now we got a new customer'. Something that's sort of a big thing. Then it's typical that people just kind of clap their hands and react with an emoji. Because that, in a way, doesn't require that much of an answer", (Informant G). One manager claimed that it is not realistic to expect a lot of response when sharing something unsolicited as opposed to posing a direct question. The informant described members of their organisation's ESM as quite passive:

"There are a lot of people who read it, but there aren't always that many people who interact with what they read, in a way, and say their views and their opinion, or something like that. But... So the response is what you would expect it to be, really. It is not to expect that everyone will sign off that they have read an article that is published", (Informant A).

One informant told us about a negative experience, where they had shared knowledge with a colleague upon a request and there was a lack of response, explaining how they still think about this incident and how it has shaped their knowledge sharing behaviour subsequently: "He asked me for something, and I produced it and sent it to him, and then I didn't hear much more. It was just like...not even a 'thank you'. So that was a little off. But I have only experienced something like that once (...). But I was not impressed", further elaborating: "It will not go to him again next time. Because he received, and I put some effort into it as well, and then I didn't get anything back. Wasn't even a good vibe", (Informant U).

Reactions and the expression of positive emotions were described as more important to some than others. To some, the absence of positive emotional pointers like smileys might even equal negativity: "Not everyone is the best at responding in an accommodating manner...\*laughs\* ...all the time. Someone does not have their smileys as easily available, so you can feel a bit like '\*sigh\*, maybe I shouldn't have asked that?'", (Informant N). Several

informants were aware of this, and deliberately acknowledge others rather too much than too little, to prevent inhibiting others' knowledge sharing behaviour: "At least I try to be generous in responding with emojis and gifs on Slack, to show that sometimes I am more excited with some posts than others. And I would also think that some people notice: 'How many clapping-emojis did I receive on my post on Slack?'", (Informant O). Informants also described how different contributions will not equally require response: "We use another channel for saying 'happy birthday' to people. For that we don't need notifications, which is the case for other [channels] where there's more urgent matters", (Informant F). This leads us on to the next subchapter, addressing challenges in sorting out what information is relevant.

#### 4.2.4 Sorting Out Relevant Information

Since one of the goals with ESM is for members contribute with content that is useful for other members of an organisation. Irrelevant information may be regarded as noise: "Sometimes I think like: 'This is not super relevant to what we are doing', so in those cases it's probably a bit more noise than it is very relevant", (Informant O). Informants described how it is not always easy to sort out relevant information in ESM: "Some will find that there is a lot of information available on Slack, so that information overload can occur. And that they are unable to absorb and sort everything, and also to know whether it is relevant or not", (Informant O). One informant pointed it out quite clearly: "It would have been nice if I just didn't have to hear about things that weren't relevant", (Informant U). Informants explained that it is possible to select specific content to be presented to, according to one's interests and areas of work: "In Yammer, you can choose what you subscribe to. (...) Access is controlled according to the channels you are in. That makes [the content] relevant, leaving no noise. I am not exposed to everyone else's noise, and when something reaches me, it's because it's likely to be relevant", (Informant F). Another informant also mentioned the option of choosing what content you are presented to: "What's so great about [our platform] is that you can sign up for what you want to see yourself. If you're not interested, or you think it's just noise, then OK", (Informant C). This freedom of choice was lifted by another informant as well: "If I'm on a channel and feel that there are only things that don't concern me and that I have nothing to share, then it's actually possible to just mute that channel. Or unsubscribe for that matter, but that's a bit more drastic", (Informant Q).

ESM provide the opportunity of receiving notifications when there are new posts or updates, and there is a desire to stay updated: "I always keep up if I see that there is

However being bothered and disturbed by notifications was a recurring theme in the interviews, with several informants referring to it as spam: "Since there are a lot of people who experience a lot of spam on Teams, many people don't check it", further describing that a lack of notification-administration can be the reason: "Not everyone understand that you can turn off notifications on the various subgroups, which means that people just boycott Teams", (Informant E). Notifications were perceived by many of our informants as disturbances, like for this informant: "There are a lot of notifications, and I notice that it's getting annoying to me. That all these notifications are disturbing. Because you get pushed to check", further elaborating how the notifications appear on the mobile device, therefore being difficult to distinguish from private notifications: "I have tried to be aware of which channels I follow and which ones I have notifications on. Because on mobile, Slack and e-mail also become part of all private notifications [like] Instagram and Facebook", (Informant T).

Notifications may be perceived as disturbances: "I receive a notification every time someone sends a message there [in Teams]. If there are 30 subgroups it gets quite noisy", (Informant E). Another informant also argue how notifications can be disturbing: "I very often feel that work is disrupted by having Teams there", further explaining how this calls for measures: "Sometimes I just have to turn my phone over, and set 'busy' on Teams to not get notifications, to be able to get something done", (Informant J). Cognitive capacity to handle the stream of information that exist inside ESM was mentioned as a challenge:

"That is one of the challenges in this world, with knowledge sharing and all these channels: People's cognitive capacity to deal with everything. The world becomes a stream of requests and events, and you only have time to act on some of them. And yes, we are very aware of that as a challenge", (Informant F).

The same informant elaborated how noise and continuous disturbances demands making oneself unavailable: "Like, we must manage our own time and our own capacity a lot more than before, being available on all channels all the time. Often, we have to make ourselves unavailable, to get to do other things of significance", (Informant F). Another informant shared similar thoughts: "I used to multitask a lot more before. But that sort of waters out what you are doing in that very moment. So now I am more aware of being present. Now I am doing this, and I will check out that other stuff later", further elaborating:

"I have become more and more aware of this lately, that I rather want to seek out information than having it pushed to me", (Informant T).

#### 4.3 Facilitating Aspects of ESM

When talking to our informants about the use of ESM, we asked questions about possible benefits they might gain from sharing knowledge. We also asked neutral questions like: "How is the response when people post on ESM?". In this section we will present how our informants talked about the positive aspects of ESM usage, like supportive reactions. We will also show how our informants talked about taking advantage of ESM to gain benefits, for example through letting other people know about your skills to gain precedence in project allocation.

### 4.3.1 Giving and Receiving Response

The prevalence of response was generally high in most of the organisations we examined: "People are good at showing that they read stuff, using different emojis, like just a thumbs-up or a smiley on something that's been written. So people get response. It's not as if it's quiet if someone writes. I don't think I've ever experienced that", (Informant R). Informants compared it to regular social media response: "It's a bit like Facebook with a few likes and some comments and maybe some good discussions on the information that is shared", (Informant A). Informants mentioned how some posts could lead to constructive critique from colleagues: "When I share something, the reactions I receive from others, it might be questions I did not think of myself: 'Why did you choose to do it like that?'. Well, why did we, right?", (Informant N). In this way, the response leads the contributor to reflect upon the choices that has been made. A director we talked to also had this in mind when answering others' posts: "But of course, it is not everything that we take on trust in stories that we're told. It's sort of: 'OK, you did it that way, but this is very strange. Why did you do it like that?'", (Informant F).

Most of the informants told how the response was generally positive when employees publish posts on ESM: "Normally it's like... It is positive. I have never experienced that something is being received in a negative way. So that is reassuring", (Informant L). Almost all the informants who share on a relatively regular basis explained that they usually receive response, and not only to questions that require an answer: "Yes, then there is always something like: 'Oh, so nice', 'Exciting'. Some form of... at least 2-3 comments in that direction. Plus someone giving a thumbs up", (Informant R). A manager described how in those cases where the content doesn't require answers, it is easy and simple to only react

upon it: "It is more that you just react and show that you've seen it, sort of. [For example] thumbs-up, or showing that you think it's funny", (Informant G). A seasoned informant compared today's possibility of reacting to posts with former custom, before ESM was introduced: "You got extreme amounts of email. Like, receiving 50 congratulation messages when winning a new project. (...) Now, there's thumbs up, right", (Informant T), describing how not all information require the same type of reaction. One informant described how one reaction can quickly lead to more people reacting: "With the emojis, it's sort of, if someone starts, even more people will join. Seeing: 'Wow, this [post] has 20 reactions', like: 'OK, what's going on there?'. Makes you focus on it", (Informant P).

Informants described how comments was used as a way of giving support: "Short messages, like 'very good', 'nice of you to share'. Just short feedback, but positive, in the form of praise", (Informant E). Supportive reactions may be perceived as recognition: "The recognition comes in the form of how people react", (Informant L). A manager described appreciation as the best kind of recognition from others: "You feel that people sincerely appreciated it. It's probably the best kind of real recognition. (...) And perhaps that is what makes you maintain that activity, and that you actually keep contributing", (Informant O). Several informants explained that managers are often the ones who comment, to give recognition to the knowledge sharing behaviour: "Maybe some of the ones higher up write like: 'Thanks, great', just to like show that it's noticed", (Informant D). Recognition may also be given by peers to show how a post was useful: "If I go back and look at something that happened two years ago, and then I use it, I kind of give a reaction, just to say 'thank you', I guess", (Informant P).

# 4.3.2 Providing and Receiving Support

A manager described how everyday work is characterised by a lot of requests for help in ESM: "It happens many times a day. We have a team chat with everyone on my team. And there I probably ask [for help] a couple of times a day. And within a couple of minutes there is someone who (...) explains to me how to do it", (Informant A). A somewhat experienced consultant mentioned typically posting: "I think this is a bit difficult to understand. Does anyone know how this is described?"", (Informant C). Another manager also described having a culture for asking, typically asking for others experiences with the same issue, like: "'Hey, I have a customer, and I'm going to have that project, and I'm a bit unsure of how to do it. Has anyone done it before?' (...) So it's very much like you raise a hand and then in a

way you take it from there, rather than the opposite way", (Informant G). When asked to describe how one typically requests knowledge, an informant talked about how asking openly at ESM was easy, when asking in the "right" channel:

"Very often I actually ask on Slack. So, for example, if I wonder if someone has made an offer related to something ever before: then I am confident that I only go into one channel where I know that everyone who writes and has written offers is in that channel, which is a completely open channel, and then I just say: 'Hey, I'm doing an offer, such and such. Is there someone who has had a similar case like this before?' And then there is an answer in the thread, and the need is always solved", (Informant O).

Most of the informants described how the help they received from colleagues was experiences as very useful: "We sit and work on a lot of the same things. So usually that response is very, very relevant and helpful", (Informant G). This was also illustrated by another informant "I see [the usefulness] as very high. Because people have a lot of insight, and people have a lot of experience built up already, so often I would say that it is very useful to get [help]. And it's also very good to have it so accessible because you don't have to sit and figure things out all over again", (Informant B). Another newly hired consultant also highlighted the appreciation of receiving new perspectives, when answering to the question about usefulness: "Very very useful. I'm completely dependent on… For some things, it's good to know what a rule consists of or what to say, or what applies, but… They [the colleagues] are very good at what can also be relevant. They are good at like: 'If you say this, then you will also be asked about this', so that they are very good at showing the totality of something that…even if one has some knowledge, there is much more that perhaps also belong, but which one does not necessarily think about", (Informant D).

However, it is not always that your colleagues have the experience or expertise to help you. Nevertheless, our informants talked about receiving help, even in such situations: "If they can't even help you because they know nothing about the topic, they use @mention, and mentions the name they believe will be able to help you", (Informant R). It seems to be a recurring theme that you should help each other anyway: "I expect that if I ask a question, someone at least tries to help me. And I think, or I would find it strange if not everyone else has the same thought", (Informant R). When talking to a somewhat experienced manager, it was described how one as a manager may feel a greater responsibility to avoid questions

being left unanswered: "It's more important for me to put people in contact with others than to just not answer. In a way, it is one of my responsibilities as a specialist group leader to ensure that people get help", further describing how this is often used by further referring to and tagging the ones who have the right competence: "So as the leader of a professional group, I tend to refer people to those who can probably answer this, or to tag people who I know have knowledge about this", (Informant A).

One of our informants, a director, referred to a book about how receiving help was a benefit you could gain from being kind and helpful to people in one's own network: "It is simply being kind and being useful. Don't think cynically, but simply be a kind person who helps people and to have no ulterior motives", further elaborating on what benefits this may give back: "Then what you get is that they will help you", (Informant H). Gaining help in return, was also brought up when a consultant talked about what possible benefits can be gained from sharing knowledge: "Hopefully that others will share their [knowledge]. Almost like the norm of reciprocity", (Informant I). However, many talked about how reciprocating the help did not have to be directly to the same person. When asked about if one thinks that colleagues expect to get help in return, one of the consultants described: "Yes, but not necessarily from me. I don't feel like: 'Now I helped you, so you have to help me later'", (Informant Q). Another consultant further explained this phenomenon: "I feel that... if I get help, then maybe I owe the organisation to help back. But it doesn't necessarily have to be the same person", (Informant N). The same informant reflects upon how gaining help almost makes one feel obligated to help back at a later stage, thinking that this might be a reason why so many share knowledge and help each other: "If I get help, I think I should get better at answering others when they ask for help. At least that's how I feel. So if everyone feels that, then that is probably part of the reason why there are many people who help", (Informant N). A manager had reflected upon the basic elements on which knowledge sharing is built and emphasised the importance of not expecting to get help back from the exact same person: "I think it's very important that you provide help anyway, as long as you can, and have no expectation that the same person will help back another time. And that's probably what the whole thing is about...", (Informant A).

# 4.3.3 Letting Others Know You and Your Skills

Sharing knowledge on ESM may reflect your interests and skills: "What I think is great about being visible is that it's clear who are good at what", (Informant M). Several informants also talked about how this could allow you to become known as a person who

shares a lot: "If you're very active on Slack, they know: 'Oh, you're the person who posts a lot", (Informant P). Creating such an impression was generally seen as positive: "You are seen as a very engaged person who cares a lot and has a lot of information and likes to share things. I'd say it's seen as a good quality", (Informant B). This was elaborated on by another informant, who reflected upon the sacrifices one takes when being active on ESM when reacting to other's posts: "When you choose to spend a lot of time answering other people's questions, that's time you could have spent on your own tasks", further emphasising: "how important the effort is to somehow bother to walk away from your own work, although there may be someone waiting for me to finish [my own tasks] as well", (Informant N).

Usually, the things one posts on ESM, reflect one's professional area and skills, which can make the process of sharing knowledge easier: "Sharing knowledge becomes easier when you see to whom it may be relevant, and who may have information that is useful", (Informant J), which was also described by another informant: "For my part, who has been with the company for a couple of years, I know where to look. And at least who should I ask if I wonder about something", (Informant A). People may become aware of your expertise and take advantage of it: "If you share your knowledge, you can gain status as a subject expert, so that people come to you", (Informant J). People may therefore ask for your help based on your expertise, but also based on you being perceived as a helpful person: "This is a very clever person. He helps with anything. Use him", (Informant A). One of our informants also talked about how wanting to become a manager, led to some sort of internal marketing of one's own skills:

"I can admit that I have been somewhat pragmatic: When I entered a new project in 2019 (...) I regularly posted updates on Slack so that people could see that I was the one managing the project, even if I was not the formal project manager. But I was the one who really did those tasks. Whether it affected the [project allocation] process, I cannot comment on. I have not taken part in those meetings \*laughs\*. But I do think it can be smart", (Informant M).

In accordance with this informant's beliefs, we found that several informants highlighted how active use of ESM may lead to a variety of professional opportunities, leading us to the next subchapter.

# 4.3.4 Professional Opportunities

Several of the informants talked about how sharing knowledge in ESM may lead to professional benefits: "If you become known and if you are good at sharing knowledge in one area or another, you will of course be sought after. When others notice you, you will often get more important roles with the customer", (Informant H). Being visible was often mentioned as a benefit for the allocation of new work tasks. "You can get new opportunities in relation to what projects you work on", (Informant J). Many of the informants talked about how you could increase your career opportunities internally when being visible, and especially according to projects and project allocation: "Being visible and like on top of people's mind. People quickly think: 'Damn, she is smart'. Like: 'She's done this and that and she's in full control (...)'. So I would say it adds to the total impression, likely influencing what projects you're allocated to", (Informant M).

When a consulting company are to begin on a new project, one or more of the company's consultants must be assigned to that project. Projects usually have a varying degree of duration as well as a varying number of consultants. From the interviews, we perceived the following three elements as important when assigning a consultant to a project: (1) whether the consultant is available, (2) whether the consultant has the right skills, and in some cases (3) whether the consultant wants to work on this project or not. The latter will of course depend on whether the organisation has enough capacity to allow preferences to take precedence over necessity. One of our respondents, a director, describes how this process unfolds:

"No one is in something [a project] against their will, but sometimes you have to...

After all, it's a job and you get paid, \*laughs\*, so it's not just fun all the time.

Sometimes it's about who's free. Other times it's about making someone available because that's what we must do to win that project. We often do that based on what skills we know someone has", (Informant F).

Furter on, the same informant talks about how being visible internally might give benefits in the process of project allocation.

"I'm not very fond of using sports metaphors for professional life, but there's something about making yourself playable. Simply show what... If you've stated in enough forums what you think is interesting, then it's likely that we more or less consciously pass those things on to you. And if you are clear about what you don't

want, then it will be similar. And so it is, sometimes times are swell in the consulting industry, sometimes we have to do really boring stuff, because that is what is in demand. But it's quite... It's kind of based on \*indistinct\*, that the more we know about each other, the easier we can help each other in the right direction", (Informant F).

By making managers aware of their interests and formal competence, the employees can gain precedence in project allocation. Many of the informants pointed out that it is complicated to be completely impartial in staffing decisions: "After all, we are only human", (Informant M). It was also emphasised how it was easier to base your decision on knowledge about your colleagues and their skills, rather than start looking in the papers:

"If we don't [share knowledge] then it's very difficult to navigate our company. In other words, then we are dependent on having to read each other's papers: go through the CVs, instead of getting to know people a little from the fact that they put their heads forward and want to share expertise", (Informant K).

A manager talked about how the allocation process partly relies on their memory:

"If we write tenders, you tend to think... It's always the ones that are on top of your mind that you kind of write down and suggest as consultants for that assignment. And if you don't know about people who have worked with something or something like that, then they will obviously be forgotten. So, the better you are at making yourself and your skills visible, the more you get to participate in", (Informant G).

Knowing *who knows what* allows consultants to link each other up to seek out the needed information or recommend colleagues who might have a relevant answer to the question. Being active in knowledge sharing networks allows staying on the top of someone else's mind, and in that way obtaining opportunities. The manager further described how this may become a circle, which might not be beneficial for those who are less visible:

"The better you are to make yourself and your competence visible, the more you get to be a part of. It is a circle, right? If you are on some cool projects and you communicate it to others in a good way, you will be taken along on new projects, because it makes them know you have this experience and competence. So it is sort of a spiral, and it obviously becomes a vicious spiral for the ones that are not so visible, because you become forgotten", (Informant G).

Many informants also emphasised that there are formal procedures for project allocation, allowing for a "fair" distribution amongst the employees. Several of the informants we talked to, said that it is a combination of formal and informal processes that makes the foundation for being assigned to projects, and that there are processes to avoid that the most visible employees get all the good stuff: "It is not as if everything's dependent on your sole effort to make yourself visible. It's a mix", (Informant R).

### 5.0 Discussion

In this section, we will analyse findings and present how affordances of ESM may influence knowledge sharing, by both facilitating and inhibiting such behaviour. We did not ask our informants directly about affordances of ESM and have interpreted their expressed reasons for sharing and not sharing knowledge using this approach. The affordance approach is complex, and many affordances overlap and can be used to explain the same phenomenon in slightly different ways. The discussion will be structured by the nature of knowledge sharing behaviour, looking at motivational factors as well as self-efficacy factors. We will continuously review and analyse our findings in light of affordance theory and present relevant previous research. Finally, we present a summary followed by practical implications and limitations with suggestions for future studies.

# **5.1 Gaining Professional Opportunities**

Our findings show that ESM can be used to gain professional opportunities. This can be done by making oneself visible, making others aware of one's knowledge. When organisational members obtain knowledge about their colleagues' skills and competence, they increase their metaknowledge, meaning knowing *who knows what*. Our findings show that active participation on ESM increase others metaknowledge, allowed by the association affordance. By publishing posts on ESM, employees can for example show what work tasks they have conducted, which clients they have worked for, what projects they have worked on, and what certifications they have completed. It was told that this metaknowledge could affect managers decision when assigning consultants to different work tasks, roles and projects. One can thus say that, by sharing knowledge, employees use the association affordance as a tool for gaining professional benefits. In other words, the association affordance may facilitate knowledge sharing by allowing employees to use this feature strategically. The awareness of these professional opportunities may work as an extrinsic motivation for employees to share knowledge through ESM.

Even though ESM may be used to increase the internal metaknowledge, since the organisations we interviewed were mostly too large for someone to know every other member of the firm and their competences. To collect metaknowledge about its employees, most of the informants we talked to explained that their organisations have internal databases with all the consultants' resumes. Talking to different informants, we got the impression that the usability of these systems varied, some being very standardised and divided into areas of expertise, while others were more dynamic and searchable. As presented in our findings, an

experienced manager argued how it could be a relief not having to search in the internal CV-database. The informant did not base their argument on poor usability, but that navigating through the company based on a certain overview of who knows what was simply much easier than looking it up. Active participation in ESM may therefore be beneficial to managers as well, making their decisions easier. If it is the case that internal CV-databases are not extensively used by managers, and that they rather rely on those who make themselves and their skills visible by being active on ESM, then employees depend on contributing to ESM in order to be considered at all for tasks and projects.

Staying on top of managers' minds was claimed to increase employees' chances of being allocated to a desired project or role. Knowing a person and what they know might be more important than knowing their formal competence. In other words, the allocation of projects might as well be based on acquaintanceships, and an individual's formal skills and competence might be less important in the allocation process. This might be explained by looking at the complex nature of consultants work tasks. As pointed out by some of our informants, consultants must be prepared to take on tasks that are not necessarily of one's core competence areas. Since work tasks vary a lot, it is important as a consultant to be flexible and able to adapt to various contexts (Alvesson, 1993). It is also argued in literature that the formal knowledge of a consultant often is surpassed by the importance of interpersonal skills and communicative competence (Alvesson, 1993). Being visible on ESM by posting articles, asking questions, commenting on others' posts and so on, can ensure that you become a familiar face to the people who make decisions in the organisation. The visible nature of ESM thereby affords users to gain professional benefits. Knowing this, one might be more motivated to become and remain an active user of ESM. The precedence one might get, may work as an extrinsic motivation that facilitate more knowledge sharing.

The informants who described this phenomenon more in depth, mainly informants having roles as either manager or director, pointed out that this was something that to some extent happened unconsciously. It was even described as inevitable, referring to human nature. The process of aligning tasks and projects to the ones that are on top of your mind, may be described by looking at the research of social psychology. When we are recently exposed to something, or multiple times, this something becomes more "cognitive available" in our mind. The phenomenon is referred to as *availability heuristic*, stating that our decisions and judgements are based upon what is easy to retrieve from memory (Kahneman, 2011). It is likely that the ones responsible for distribution of projects are affected by the availability

heuristic when making decisions about which consultants should be allocated to which project, work tasks, and roles. Avoiding this likely requires clear rules and procedures for allocation. We were informed that there exist such procedures, but informants said that despite this, managers' memory usually play a role, being that everyone is human. One can argue that the presence of such unintended incentives, like making yourself known to gain professional benefits, is beneficial for knowledge sharing. Still, if everyone is to act based on this principle, then the majority will "drown" in the manager's memory. One of the basic principles of the availability heuristic is that some impressions are stronger than others, and these are the ones who end up being available in one's mind. If all the consultants in an organisation tried to become visible to managers, it would become more difficult to stand out, and thus be remembered. Such an incentive scheme can therefore only work in organisations where a small number of the consultants are visible and active users of ESM. One can therefore question whether this effect of visibility will matter in being able to solve the well-known challenge of lack of contributions in ESM.

When our informants talked about the consulting industry and what characterises it, it was mentioned that it is often about making as many of the hours their employees work billable as possible. This means that consultants work on projects that are invoiced to the customer, rather than having so-called "free time". One could claim that any work not directly related to the client is an expense, even knowledge sharing, especially with a bunch of other, billable tasks waiting. Based on our findings about how increased meta-knowledge is used in the allocation of work tasks, the essence seems to be assigning tasks that provide billable time. One can assume that if the consultants themselves want to influence how often they get new tasks and projects, they should be active on ESM and share their knowledge to become visible to managers. If they do not, they risk being left with a lot of free time, essentially not being profitable for the company. Whether or not it is up to the consultants themselves to make sure they have a minimum of free time was not a topic we talked about during our interviews. If this is the case, increasing knowledge sharing and active participation in ESM can also give the consultants less free time on average, can be seen as killing two birds with one stone for organisations and would be regarded a win-win situation for the company.

In this section of the discussion, we have shown how affordances may be perceived in a beneficial way by employees. The affordances of visibility and association make it possible for employees to achieve professional benefits by being active users of ESM. These benefits may motivate employees to use ESM more and thereby share more knowledge. However, although motivation is seen as a predictor of knowledge sharing behaviour, it should not be taken for granted that increased motivation leads to increased knowledge sharing behaviour, especially not in the long run. Research has shown that extrinsic rewards are more effective in the short run, and that when it comes to long run investments intrinsically motivated initiatives will have greater success (Osterloh & Frey, 2000). It is also found that extrinsic rewards could hinder the development of positive knowledge sharing attitudes (Bock et al., 2005). When you offer an extrinsic benefit as a reward to knowledge sharing, one is dependent upon giving this reward continuously to ensure that the employees stay motivated. This might be difficult to do, as it will require managers to acknowledge all visible contributions to ESM, as well as making sure that these contributions become important for the assignment of tasks. If employees feel that being visible does not lead to any particular advantages, then ultimately, their knowledge sharing in ESM will decrease. Research has shown that there is a tendency for an extrinsic reward to completely extinguish an initially intrinsic enthusiasm (Osterloh & Frey, 2000). This shows how employees might have been intrinsically motivated in the first place, for example through acknowledging knowledge sharing as valuable, but when extrinsic benefits are available, the focus on the intrinsic motivation will fade. When extrinsic rewards are no longer given, the initial intrinsic motivation may not be present anymore, and thus the employee is dependent upon new extrinsic rewards, in order to be motivated to share knowledge on ESM.

Based on our findings, we got the impression that most of the organisations we talked to knew about this possible downside of extrinsic motivation. We asked our informants if they had incentives for knowledge sharing, like monetary bonuses, and almost everyone answered no to this question. Even if the organisation deliberately does not plan to have such incentives, our findings indicate that employees can take advantage of how ESM affords both visibility and association, and how this interaction between the technology and the user results in the presence of such incentives anyway. However, it is as much the interaction between managers and ESM, as the interaction between the employees and ESM, that makes this motivational factor possible. Based on this, we argue that employees can take advantage of the way that the managers perceive and act on the possible opportunities of ESM to make their everyday work easier. In other words, employees take advantage of the fact that managers exploit ESM's affordances of showing both who employees are and what their skills and competence are, based on the employees' active contributions.

# **5.2 Strategically Managing Others' Impressions**

As stated in the theory chapter, ESM can be used to strategically manipulate content to improve one's reputation, as made possible by the editability affordance. It was also apparent in our interviews that benefits such as professional opportunities, and a good personal reputation could come from being strategic in what to post. For instance, knowing that it is beneficial to be visible on ESM because it will result in people having you on top of their mind, likely leads to more frequent participation. Our data show that strategic usage of ESM, to manage others' impressions, is not unique to the editability affordance. We argue that strategic behaviour applies to several technological affordances of ESM. Since ESM allow for content to be visible, the affordances may facilitate self-promotion, referring to deliberately creating a certain, positive impression of yourself to others. Since posting content that exudes a favourable impression of oneself to others might lead to benefits, this will be preferred and might increase the amount of knowledge shared in the ESM. This illustrates how self-promotion, as a result of the visibility affordance, may work as a motivational factor for contributing with content on ESM. Scholars argue that visibility can be used as a tool for enhancing one's reputation (Razmerita et al., 2016). A study by Giermindl et al. (2017) found that employees strategically present themselves in a favourable light to gain increased recognition by others. Through association affordance, this visible self-promotion gives colleagues an impression of what you know. Van Osch et al. (2016) discovered how twothirds of ESM users primarily used the platform for posting self-promoting content, without even consuming content created by others.

In our interviews, informants compared ESM to the professional social networking site LinkedIn, being a site widely associated with people showing off in their posts. It was pointed out how ESM can be used strategically by members to influence others' impressions of them, for instance in bragging and coming across as more knowledgeable than what is necessarily true. Informants who mentioned these aspects of ESM stated that "the LinkedIn vibe" likely reduces participation. People bragging and putting themselves in an overly favourable light was mentioned as reasons. One might argue that this reflects an absence of a culture for sharing, where employees feel that using ESM strategically to shape others' impressions for gaining opportunities come across as phony or exaggerated. This might be explained by looking at the Danish *Janteloven* – "Law of Jante", which is a set of hidden or unspoken social norms of conformity that has been said to be especially prevalent in Denmark and Norway (Başak, 2021). The phenomenon is described as a "who do you think

you are?"-attitude, addressing how it is socially unacceptable to stand out, and that one should conform to others' behaviour (Başak, 2021). Janteloven might entail that standing out from your colleagues is considered inappropriate, which might reflect our findings where informants referred to knowledge sharing behaviour as "bragging". Research has found Janteloven to influence knowledge sharing behaviour in an ESM environment (Razmerita et al., 2016). Conforming to others' behaviour might be preferable to obtain a good reputation amongst colleagues. Reluctance amongst our informants to post unsolicited for large audiences can thus be due to Janteloven.

However, to gain a good reputation amongst managers, it might be expedient to think that showing your competence and skills, as some call "bragging", would be beneficial. Research show that a good reputation can be desirable in work context as it may lead to individual professional benefits (Rode, 2016). Even though the employee might be motivated to share knowledge to gain a good reputation and thus professional benefits, we believe, based on our findings, that conformity and Janteloven might constrain such a behaviour. We argue that this constrainer, Janteloven, is present in ESM due to the visibility affordance, because one's contribution can potentially be seen by the entire organisation. In other words, the visibility affordance might lead to a decrease in knowledge sharing on ESM, as it facilitates strategic impression management and thereby is an arena for socially unacceptable behaviour, like "bragging".

Some informants described how by sharing knowledge, one could gain a reputation as a knowledgeable person. When showing and sharing personal competence and expertise, employees can earn respect from colleagues and thereby "establish themselves as experts" (Ardichvili et al., 2003, p. 69). It is reasonable to think that gaining a reputation as an expert, is not as closely related to helping behaviour, as when gaining a reputation as a helpful person. Situations in ESM more closely related to expert-status might be public posts. These may not necessarily aim to be of help to others, but may be more presentations of own work, experiences, or about a specific field of study. In this way, the employee can strategically choose to present themselves in a manner that may lead others to receive them as an expert. An employee can present one's expertise and competence to the whole organisation, with the aim at gaining status as an expert. However, by being a person who often replies to questions, one can also give the impression that one has expertise within a field of study. If a person usually has an answer to the questions being asked, people might perceive this person as clever. For this reason, gains in professional reputation may work as a motivator for sharing

knowledge in ESM, both when answering questions, and sharing knowledge unsolicited. Previous research has also found that employees are more likely to contribute with their knowledge on ESM when they believe that it could enhance their professional reputation (Rode, 2016; Wasko and Faraj, 2005).

Since ESM provide the affordances of being visible, traceable, and persistent over time, employees can gain a good reputation on a large scale across the entire organisation (Rode, 2016). Studies have shown that gains in reputation can motivate employees to share knowledge even though the knowledge recipient is unknown to the knowledge contributor (Constant et al., 1996). Based on these previous findings, we can assume that employees being extrinsically motivated to gain a good professional reputation will especially share more knowledge on those groups in the ESM consisting of a broad audience, where your content has the potential to reach a large amount of people. However, in this study, this was not the case. Our findings show how most of the activity and engagement on ESM was directed towards the smaller, departmental groups and chats. We argue that, beside the presence of *Janteloven*, this might be due to factors affecting self-efficacy, to which we will return in chapter 5.6.

By helping colleagues and sharing knowledge, informants talked about how they could gain reputation as a helpful or generous person. A reputation may result from a person's history helpful behaviour towards others (Baker & Bulkley, 2014). Assisting your colleague, for instance by replying to their questions, is considered helpful. Sharing knowledge unsolicited, when there is no request is also an opportunity. For example, employees might share articles or other kinds of relevant knowledge to a colleague, because they think that it might come in handy for them. We asked our informants whether they sometimes share knowledge unsolicited, but the general tendency was that they rarely do. Informants described that it is easier to share upon request. Hence, we believe that our informants were not motivated to gain a reputation as a helpful colleague, and this was therefore not a reason for them to contribute with knowledge on ESM.

# **5.3 Support Through Response**

As part of the interview guide, we asked our informants how they perceive the general response, when someone posts something in ESM. Our findings indicate that most of the employees were satisfied with the response and experienced it as supportive and positive. Previous research shows that perceived member support is particularly important for

facilitating active participation in an online community (Pai & Tsai, 2016). Hence, we can assume that receiving likes, reactions, and comments on posts will motivate for future engagement in the ESM, thereby increasing the amount of knowledge contributions. We argue that the possibility to react on others' posts, afforded by *metavoicing*, facilitate knowledge sharing by creating engagement which thus affects motivation. One might also argue that the visibility affordance is the basis for and enables response, since it allows all members to view other's contributions.

When posting a question on ESM, the hope is to get a response that is relevant and helpful to the current issue. Asking for help requires other members to give a response in the form of comments, that hopefully contain an answer to their question. Several informants said that their issue always got solved, even within a very short time. As presented in our findings, employees also experienced getting response even if their colleagues did not know the answer. This was due to the feature of tagging, the possibility of mentioning other members as part of the comment, notifying these members about the content. It can be argued that this feature might increase knowledge sharing, as the knowledge seeker is directed towards a more reliable source who hopefully knows the answer. This is only possible when employees are familiar with their colleague's competence, allowed by the association affordance - employees knowing who knows what, facilitating knowledge sharing by using the feature of tagging. One might also argue that the association affordance increases the possibility of an employee receiving an answer to a question, since employees who don't know the answer to the question may refer to others who hopefully do.

When receiving help, the usefulness of the knowledge has been shown to be an important predictor of further knowledge sharing (Pai & Tsai, 2016). This might be due to the perceived value of the response one has received. If the response is helpful, the benefit individuals gain from asking questions in ESM is also high. We asked our informants about their perceived usefulness of the help they receive from their colleagues. The majority found the help to be very useful. This perception of gained valuable help will probably increase the employee's motivation to ask questions on ESM in the future. It is reasonable to think that when the support is valued and considered, the employees become more motivated to further contribute with knowledge and engage in and ask questions on ESM.

Research has also shown that when the information employees perceive from others is perceived as useful and valuable, it creates an obligation to reciprocate the help (Wasko &

Faraj, 2000). It was also specified by Gouldner (1960), who addressed this norm of reciprocity, that the basic character of the norm was that the obligations are not unconditional, but in response to the benefits given by others. Our findings show how reciprocity affected employees' intentions to share knowledge in ESM. However, our informants described how direct reciprocity, the concept of *I help you*, and you help me, did not have any influence on employee's knowledge sharing behaviour, but general reciprocity did. The concept of *I help you*, you help someone else, proved to have a greater effect on the employees' attitudes toward their own and others' contributions to ESM. Who the employees helped in return was not necessarily the person who helped them. Our informants described how you offer your expertise to someone who needs it at a later stage, just like the person who helped you likely have received help from someone else at an earlier stage. The aspect of reciprocity is thereby between the organisation and its employee, rather than directly between the employees.

Many of our informants talked about how they felt an obligation to contribute with content and knowledge, partly as a contribution in a joint effort. Taken together with their perception of the value of knowledge sharing, one can argue that their motivation is more pointed toward a moral obligation and interest to contribute to the organisation, rather than the self-interest of receiving help in return at a later stage. Early research on electronic communities of practice also found that such a moral obligation motivated people to share knowledge (Wasko & Faraj, 2000). More recent research also found reciprocity as a perceived beneficial factor motivating to share more knowledge in ESM (Rode, 2016). However, that study concluded with the motivation being connected to reciprocal benefits in regards of social rewards, thereby contradicting previous research, as well as the findings of this study.

Since we, based on literature, identified the norm of reciprocity as an important factor for knowledge sharing behaviour in advance of our interviews, we included this instrument in our interview guide. If the informant did not mention something topically along with the norm of reciprocity unprompted, we asked them the following question: "If you help someone, do you expect them to help you back later?". To our surprise, almost no one answered yes to this question. We expected there to be an expectation of the favour being returned, in line with the reciprocity norm. To see if there was a weakness in the way we posed the question, we tried to twist the sentence around for the remaining interviews, asking: "If you receive help from someone, do you think they expect you to help them back later?".

Interestingly, this resulted in more informants confirming the question, and answering that although such an expectation was rarely uttered, they still felt that it was present. This finding makes us think about what attitudes are socially desirable to our informants, and how this shaped their responses. For instance, replying "yes" to the first version of the question might imply that they would not help someone who they believe are not going to return the favour. Similarly, answering "no" to the latter version of the question could come across as egoistic and self-absorbed. When you help colleagues through ESM, the act of helping becomes visible to other members of the platform, which may lead to a sense of obligation for the knowledge recipient to give back. The visibility affordance makes others' helping behaviour visible, which can reinforce the feeling of having to reciprocate the help. The whole scenario can also illustrate how individuals judge their own actions more strictly than others', and that one holds oneself to higher standards.

When asked whether the respondents felt that it was expected to share knowledge, almost everyone confirmed. However, some of them added that it did not necessarily have to be about sharing knowledge, but just being active on the ESM and in that way visible. Although knowledge sharing behaviour was perceived as an expectation, only a few of the informants confirmed that their organisation has some sort of measurement on their degree of knowledge sharing. We got the impression that most of the informants wanted to share knowledge to contribute to the organisation, despite a lack of monitoring how much knowledge they really share. However, several mentioned that knowledge sharing is frequently a topic in the employee appraisal. Thus, they knew that managers were following their knowledge sharing on ESM, even if they had no quantitative measures for it. On this background, it can be argued that the motivation to help others and give back to the organisation is not based on a perceived obligation to help. Rather than the moral obligation to contribute, or benefits like gaining help in return, it may be a result of the employees being "watched" and "controlled" by managers. In that way, the motivation can be connected to gaining a good reputation amongst managers, as discussed in the sections above, or even hoping that your sharing behaviour will be noticed and taken into consideration when promotion is at the table.

### **5.4** The Presence of Noise

Since ESM allows for content to become and remain visible to the entire organisation, extensive amounts of information will likely only be relevant to a fraction of the employees. During the interviews we asked our informants if they considered some of the information

existing on ESM as being noise. Many informants stated that it was difficult to decide whether information is relevant or not. Someone considered information not directly relevant to them as noise. Since consulting companies are organised interdisciplinary, the same content will not be of relevance to everyone. Some of the informants explained how they avoided to engage in ESM due to the presence of noise. Hence, the visibility affordance, in addition to the persistence affordance, might inhibit knowledge sharing, by allowing all contributions to become visible, and persist over time. During the interviews, we also became aware that our informants experience irrelevant notifications as disturbing. They described how receiving a ton of notification decreased their desire to engage in the content being published on ESM. Continuous flashing and vibrating notifications from the cell phone were described as disruptive, especially when the notifications were not directly relevant. This might often be the case when content is published openly in large groups. Many informants described turning off notifications, and even opt out of certain channels. A lack of engagement in ESM may therefore be explained by disturbing, irrelevant notifications.

Even though the visibility affordance allows individuals to see content created by others, the channels and groups in ESM are usually only open to those who are members of these. Some informants described how the ESM channels each have their predefined purposes. The possibility to follow, to ask for access to a channel or group, as well as the option of subscribing and unsubscribing to notifications allow individuals to only follow channels considered relevant to them. Some also described membership in channels of noise, like "birthday-channels", but that they were not obligated to have notifications turned on in these. This freedom of choice can be illustrated through the affordance of selectivity, letting employees choose personally what content they want to view and follow. This affordance can be argued to be closely related to the possibility of notified attention, which includes the option of turning on or off notifications. Selectivity may be an important affordance that affect the amount of knowledge shared. Allowing employees to choose the content they subscribe to might increase their motivation to share knowledge, as the employees avoid feeling that they are drowning in information that does not apply to them. Getting relevant notifications may thus increase engagement by encouraging active participation and contribution in discussions, forums and knowledge-sharing activities that happen on ESM. For this reason, one can argue that the selectivity affordance may enable knowledge sharing, as well as reduce the tendency for notifications, afforded by notified attention, to decrease engagement and thus inhibit knowledge sharing.

# 5.6 Questioning Your Own Knowledge

Through our findings we discovered that one of the reasons explaining why individuals are reluctant to contribute with knowledge sharing in ESM is because of doubting their knowledge and thus the value of their contribution. When individuals evaluate whether they are the right person to contribute, or whether their knowledge is useful, the perception of one's own knowledge makes the fundament for the evaluation. Employees who aren't confident in their ability to contribute with knowledge, are less likely to participate actively in ESM than employees who have such confidence (Rode, 2016). Our findings show that employees were afraid of their contributions not being valuable, relevant or useful to their colleagues. Research has shown that reluctance to participate in ESM can be due to the contributions being visible to other users as well as the fear of posting something wrong in front of everyone (Berraies & Irum, 2021; Heymann et al, 2020; Sun et al., 2021). When working in a consulting company, you are surrounded by knowledgeable peers. This could be a reason for the reluctance to share on ESM. Being surrounded by knowledgeable people might skew the perception individuals have of one's own but also of others' knowledge. Although there are several upsides to knowing who knows what, being aware of others' areas of expertise might lead individuals to compare their knowledge to their peers. Assessing one's skills in comparison to others might lower individuals' confidence because the knowledge is measured to someone else's standards. If individuals perceive their own knowledge as poor compared to others, motivation to share knowledge will likely decrease. Our findings show that informants are reluctant to answer questions posted in ESM, because they doubt whether they are the right person to answer. Such a doubt can make employees reluctant to publish something in front of their whole organisation. The visible nature of ESM can arguably enhance insecurity because individuals get an impression of others as more knowledgeable and competent on the specific topic. Such a perception might not be correct, since ESM can be strategically used to customise the information that is available to others. Nevertheless, a perception of others being more knowledgeable likely leads to the conclusion that there are others who should rather reply and share their expertise and can thus inhibit participation in ESM. It might not be the case that someone is less competent than their colleagues, but the way that ESM is shaped can create this illusion.

In addition to one's contribution being visible to the whole organisation, a reluctance to participate in ESM could be due to the manager seeing the contribution. As addressed in section 5.3, several employees mentioned how their knowledge sharing was often a topic in

their employee appraisal. The employees therefore know that their managers might be "watching" their knowledge sharing behaviour. Knowing this could be a reason to be reluctant to share, especially if the employee already doubts the value of their contribution. Since your post is not only viewed by "strangers" but also by managers and other people within the organisation making important decisions, the risk of losing face can be perceived as high. In this way, one can argue that employees don't share knowledge in ESM due to the fear of that their posts might have negative professional consequences. Self-efficacy theory states that people make a personal, unconscious assessment of their own abilities to perform a certain task and that they avoid activities they believe are beyond their abilities. As stated in the theory chapter, self-efficacy is shaped by past experiences, but we argue that simply a fear that others will unveil one's lack of knowledge might also affect an individual's selfefficacy. Employees might be afraid that they, by asking a question on ESM, reveal some lack of knowledge, and that if the manager sees this, the employee might be assessed as not having the required competence to execute a task. If self-efficacy is low, chances are this will decrease knowledge sharing behaviour, because employees are be motivated to avoid asking questions in ESM, to avoid being viewed as incompetent by managers or peers. However, our findings indicate that such fears are not rooted in how the organisations really work. Several informants talked about how their managers frequently encourage them to ask questions openly on ESM, to be able to utilise the knowledge that the organisation possesses. Findings indicate that contribution and participation is typically encouraged through recognition such as reactions and response.

Informants mentioned that receiving response on their knowledge contributions ensured them that their contributions were perceived as useful. Research has shown that received response will influence people's beliefs in their own abilities and thus affect self-efficacy (Legault, 2017). Positive feedback will increase the perception individuals have of their own competence, and negative feedback will diminish perceived competence, and thus hinder engagement and interest (Legault, 2017). Some informants mentioned how responding to others was used as a way of showing how a contribution had been helpful. In fact, most of our informants described how they often used response as a way of showing that the knowledge contribution either was useful, relevant or interesting. In the same way, some of our informants talked about unclarity of whether their contribution had been considered valuable, depending on the response they received. For instance, the absence of emojis in comments made one informant unsure about whether their post was "appreciated" and seen

as relevant, and another informant mentioned how it was strange that there was a lack of response when sending a contribution directly to a colleague. However, absence of response was the exception, and very few talked about having experienced it. Bad experiences lower individuals' self-efficacy, again lowering the chances of future contributions being made, in this case contributions to knowledge sharing in ESM. Generally, people appreciate recognition for efforts they have put in an organisation, and peer-recognition has been found to be one of the main motivational factors for knowledge sharing, as employees often strive to be recognised as valuable (Javernick-Will, 2012). Because of this, organisations should ensure good knowledge-sharing experiences for their employees to enhance knowledge sharing behaviour. It can be argued that our informants' reflections of fearing having invaluable contributions is surprising, since our findings also indicate that they were overall satisfied with the response they received on their posts. This might indicate that informants' reflections upon lack of response is only based on irrational fear of being neglected publicly. Nevertheless, this fear can cause the employees to avoid sharing knowledge and may work as a motivation for avoiding loss of face. We can thereby argue that the visibility affordance triggers a fear of being neglected, and that this decreases the amount of knowledge shared in ESM. A fear of neglect might be more prevalent the bigger the audience. As our findings show, the ESM groups and channels with the largest number of members were the ones that were used the least. It could be natural to assume that since bigger groups have a bigger audience, and thus reach more people, these would be attractive arenas for sharing knowledge. However, several informants described how they felt that ESM was a too visible arena. Some of them elaborated how the threshold for participating in ESM was high, especially in large groups with many members. We therefore argue that this inhibiting aspect of the visibility affordance reinforces the fear of being neglected, and thus explains reluctance to contribute to ESM

# 6.0 Summary and Concluding Remarks

Taken together, this study shows how technological affordances of ESM affect knowledge sharing, by both enabling and inhibiting sharing behaviour. The affordances of ESM that has been found to be relevant to knowledge sharing behaviour in this study are visibility, association, editability, persistence, metavoicing, notified attention, and selectivity. The affordances were found to have both facilitating and inhibiting consequences to knowledge sharing contributions in ESM. Many of the affordances were connected to and dependent on the visibility affordance, which corresponds with research, presenting visibility as a root affordance of ESM. We found that the affordances' influence knowledge sharing behaviour, by both affecting the motivation and the self-efficacy of employees.

We found that the association affordance, by letting other members of the organisation know about your skills, enable the employees to become visible amongst managers, which may increase their chances of gaining professional benefits. Acquaintance itself was also found to be enough to gain such professional benefits. Being aware of these possible benefits can work as motivation for employees to share more knowledge, to become visible amongst managers. On this background, both the visibility and association affordance can facilitate knowledge sharing behaviour in ESM. However, we argue that it is not necessarily desirable for an organisation to provide such professional benefits as a result of visibility, as it can be difficult to maintain if most employees strategically try to make themselves more visible mostly for the benefits.

Since all contributions made to ESM become visible, this makes it a fitting arena of strategically managing the content to affect one's reputation within the organisation. The possibility to create and modify content, afforded by editability, allow employees to present themselves in a favourable light. In our interviews, ESM were compared to LinkedIn, by referring to the strategic usage were employees "brag" and "show off", to gain a good reputation amongst peers and managers. ESM allow for employees to establish themselves as experts, which has shown to be beneficial for gaining precedence in processes like project allocation. Employees can therefore be motivated to share knowledge, to gain a good professional reputation and benefits. When employees use ESM strategically to achieve a good reputation, the editability affordance facilitates knowledge contributions, especially in large groups, where the reputation might potentially reach a lot more people. However, our findings indicated that the highest activity were in smaller groups, and that only a small fraction of the members of the organisation used the platform in a strategic way. This is

explained due to the presence of the Scandinavian *Janteloven*, which implies that it is socially unacceptable to stand out and show one's expertise.

The possibility of employees to react upon and comment on colleagues' posts, afforded by metavoicing, allowed for employees to receive response and support for their knowledge contributions. This allows for employees to engage in ESM, and metavoicing thereby facilitates knowledge sharing. Gaining response to questions and considering it valuable, were also found to create a positive experience which likely motivates the employee to further use ESM for asking questions, which thus will increase the overall contributions on ESM. Our findings also show how the association affordance allow for people to forward a request by using the feature of tagging, thereby sending the knowledge requestor to a more reliable source. The ability to connect people with people, afforded by association, increase the likelihood of getting an answer to a question, as it enables wider knowledge sharing across the entire organisation.

ESM consist of huge amounts of information, which must be sorted and reacted upon by employees. Employees regard much of this information as irrelevant, defining it as noise. Due to the presence of such noise, employees choose to disengage from ESM. Notifications were also perceived as noise, when being irrelevant, and employees therefore turned off notifications and opted out of groups. In this way the affordance of notified attention led to a decrease in the knowledge contributions on ESM. Since the content published on ESM persists and remains visible over time, there will exist a lot of information that may be difficult to navigate through. This might lead to information overload and explains how the persistence affordance can work as an inhibiting factor to knowledge sharing and active engagement in ESM. However, these challenges may be solved by taking advantage of the possibility to manage one's notifications, as afforded by selectivity, which allows one to manage which groups to subscribe to and thereby follow.

When contributing with knowledge on ESM, employees can be reluctant to share, due to their contributions being visible to potentially the entire organisations. Our findings show that this visibility makes the employees question their own knowledge contribution, being unsure whether they are valuable to others or even of high enough quality. These uncertainties indicated that employees had low self-efficacy related to knowledge sharing on ESM. However, the presence of this lack of self-confidence in own abilities was not due to previous negative experiences on ESM. In fact, employees solely feared that other members

of the organisation would question their competence or the relevance of their contributions. We therefore argue that the presence of this fear, affect their self-efficacy, and how the visibility affordance in this way may inhibit knowledge contributions on ESM. Our findings also show how the employees were dependent upon response to be able to increase their self-efficacy, as the response were seen as a reassurance that their contributions were of value to others

# **6.1 Practical Implications**

By looking at how the affordances of ESM both facilitate and inhibit knowledge sharing behaviour, this study contributes to extend our limited understanding of the challenges organisations face when implementing ESM. Gaining insight to the reasons for employees to both share and not share knowledge on ESM also helps overcoming the known bias towards the positive effects of ESM. We contribute to balance out the research on how ESM afford behaviour that may both increase and decrease the amount of knowledge being shared. Our findings shed light on how digital knowledge sharing in ESM is essential to achieve a good flow of knowledge internally, and how this is afforded by the interaction between the technology and the user.

Applying the affordance approach to examine knowledge sharing behaviour on ESM has not yet been extensively examined by scholars, and this study therefore contributes with research in a relatively new field of study. With this study, we confirm how affordances of ESM is essential to encourage and motivate knowledge sharing behaviour, but also argue that the affordances may decrease knowledge sharing. These downsides are important for an organisation to become aware of, as this can lead to a favouritism of individual employees within the organisation and contribute to a vicious circle where those who are active in ESM constantly receive more benefits in their career.

We hope that our study will contribute to the field of knowledge management, by letting organisations become aware of the positive and negative aspects of affordances of ESM to knowledge sharing behaviour. Hopefully our insight will contribute to getting a better understanding of "the main challenge" organisations face in their implementation of ESM, to better attain an optimal knowledge flow and make the best possible use of the knowledge that already exists in the organisation.

# **6.2 Suggestions for Future Studies**

Organisations often consider it desirable to get all the employees to become active users of the ESM. However, a study from 2018 pointed out that this shouldn't necessarily be a goal for the organisation, by referring to how lurking behaviour also can be a beneficial form of participation (Giermindl et al., 2017). For future studies, it would have been interesting to also look at how lack of contributions could be beneficial for knowledge sharing, especially related to a potential absence of noise and information overload.

Future studies should also look at how the affordances of ESM affect other aspects related to knowledge sharing, such as culture. Our findings shed a light on how ESM can be used strategically, but how there was an absence of culture for such self-presentations. Interesting aspects would in this case been how a culture unfolds and expresses through the digital environment, and how knowledge contributions may be seen as expressions of culture.

Interesting directions for future studies would also been to look at the actual contributions of the employees and how they correlate with their self-reported attitudes and intentions. We got the impression that employees wanted to help their colleagues and contribute to the organisation but were unable to examine whether their knowledge contributions to the ESM mainly were of helpful or unsolicited character.

Our study did not find any significant differences between hierarchical position, gender and digital competence. These differences would have been easier to examine quantitative with a larger sample, and we therefore suggest including control variables for future studies. Especially it would have been interesting to examine whether digital competence influenced employee's self-efficacy to share knowledge on ESM.

Further investigations on a more detailed level are also recommended, as we got the impression that affordances' influence on knowledge sharing will vary dependent on which type of content is being shared. Future studies can have a look at if there exist differences between actions of asking of help, commenting on posts, share positive and negative experiences, as well as share knowledge and professional advice unsolicited. Motivation is also shown to affect both the quantity and quality of the knowledge contributions (Rode, 2016), and this is a detail it would have been interesting to look further into.

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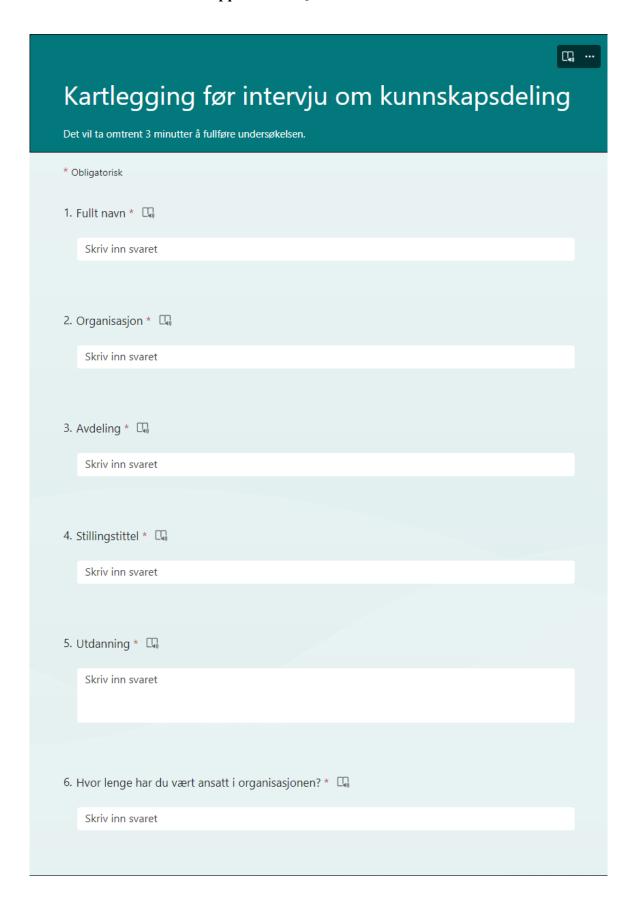
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Word count: 23 644

# **Appendix A: Interview Guide**

- 1. Hvordan ser arbeidshverdagen din ut?
- 2. Jeg ser du har \*\* stilling. Hvilke ansvar følger med denne stillingen?
- 3. Fortell litt om dine (team) kollegaer
- 4. Jeg ser at bedriften din bruker litt ulike kanaler. Hvilke formål har de ulike?
- 5. Hvordan opplever du nytteverdien til systemene?
- 6. Hvordan opplever du brukervennligheten til de ulike plattformene?
- 7. Deles det mye «støy»?
- 8. Kan du beskrive en typisk situasjon hvor du spør eller leter etter kunnskap?
- 9. Hvordan opplever du relevansen/nytteverdien av kunnskapen du får fra dine kollegaer?
- 10. Hvilke rutiner har dere for å legge inn eller dele kunnskap på disse plattformene?
- 11. Hvordan er aktiviteten på de ulike plattformene?
- 12. Hvilken kanal foretrekker du å bruke?
- 13. Kan du reflektere litt rundt verdien av kunnskap og kunnskapsdeling i din organisasjon?
- 14. På hvilken måte oppfordrer organisasjonen til å dele kunnskap?
- 15. Hvilke fordeler kan du oppnå av å dele av din kunnskap?
- 16. Kan du beskrive en situasjon hvor du selv har blitt spurt om kunnskap/informasjon
- 17. Hvilke former for anerkjennelse gis til de som deler kunnskap?
- 18. Blir din/ansattes grad av kunnskapsdeling målt på noe vis?
- 19. Kan du si noe om betydningen av å være synlig internt i organisasjonen?
- 20. I hvilken grad opplever du at det er forventet å dele kunnskap?
- 21. Opplever du at lederne i \*bedriften\* er aktive kunnskapsdelere?
- 22. Kan du fortelle litt mer om hvordan du vurderer din digitale kompetanse?
- 23. Opplever du å ha et svar når noen spør deg om noe?
- 24. Hender det at du uoppfordret deler informasjon/kunnskap med en kollega?
- 25. I hvilken grad deler dere erfaringer i din organisasjon?
- 26. Hvordan opplever du at den generelle responsen er når noen deler kunnskap?
- 27. Kan du fortelle om en gang du selv delte kunnskap på en av plattformene?
- 28. Kan du si noe om terskelen for å dele? (Hva med terskelen for å spørre etter kunnskap?)
- 29. Hva kan være grunner til at noen nøler med å publisere innlegg eller svare på åpne spørsmål?
- 30. Hvordan responderer du når noen leter etter / etterspør informasjon?
- 31. Hvordan blir det sett på av dine kollegaer å dele kunnskap?
- 32. Har du noen andre innspill?

# Appendix B: Quantitative Scheme



7. Hvilke plattformer h	ar organisasjone	en for kunnskaps	deling og komr	munikasjon? *	k []	
Microsoft Teams						
Slack						
Microsoft SharePoi	nt					
Workplace						
Canva						
Google Workspace						
Evernote						
Yammer						
Annet						
8. Hvordan vil du selv e	evaluere din did	itale kompetans	e? * 🗀			
	raidere ani aigi	raio nompotano	-19			
	Svært dårlig	Dårlig	Midt på treet	Bra	Svært bra	
	$\circ$	$\circ$	$\circ$	0	$\circ$	
Send						

**Appendix C: Informant Overview** 

Informant	Gender	Job title	Seniority
A	Male	Manager or higher	Somewhat experienced
В	Female	Consultant	Newly hired
C	Male	Consultant	Somewhat experienced
D	Female	Consultant	Newly hired
E	Female	Consultant	Newly hired
F	Male	Manager or higher	Experienced
G	Female	Manager or higher	Somewhat experienced
Н	Male	Manager or higher	Experienced
I	Female	Consultant	Somewhat experienced
J	Male	Consultant	Newly hired
K	Male	Manager or higher	Experienced
L	Female	Consultant	Somewhat experienced
M	Male	Manager or higher	Somewhat experienced
N	Female	Consultant	Somewhat experienced
O	Male	Manager or higher	Experienced
P	Female	Consultant	Newly hired
Q	Female	Consultant	Newly hired
R	Female	Manager or higher	Experienced
S	Male	Consultant	Somewhat experienced
T	Female	Manager or higher	Experienced
U	Male	Manager or higher	Experienced

*Note.* Newly hired = employed for less than 1 year. Somewhat experienced = employed for less than or equal to 5 years. Experienced = employed for more than 5 years.

Appendix D: Codebook Seri

Hovedkategori	Underkategori 1	Underkategori 2	Underkategori 3	spm nr.	spørsmål	oppfølgningsspørsmål
Kultur						
	lerskei for a spørre	En gruppe / kanal	Hpy			
		Et enkeltindivid /DM	Hgv			
			Lav			
	Terskel for å dele	Frivillig	En gruppe / kanal	44	Kan du si noe om terskelen for å dele?	
			Et enkeltindivid /DM			
		Pa etterspørsel	En gruppe / Kanal Et enkeltindivid / DM			
	Oppfordre	Tilrettelegge	Tid	29 a) og b)	På hvilken måte oppfordrer organisasjonen til å dele kunnskap?	Hvordan tilrettelegger organisasjonen for kunnskapsdeling? (ressurser som tid)
			Penger (fakturering)	28 b)	Hvordan fungerer dette med tanke på fakturering?	
		Forespecie	Hjelp/veiledning	48	(Hva med terskelen for å spørre etter kunnskap?)	
			Apent til gruppe/team			
	Egen delingsaktivitet	Dele	Hvor ofte	43	Kan du fortelle om en gang du selv delte kunnskap på en av plattformene?	
			Hvordan	43 b)	Hvordan gikk du frem?	
		Decreeding have often	And the cold of the control of the control of	AE al one of	Burelin enrandement de nige anna latar attar ( attarende lateranie lateranie)	Cold received and bearing as one decree allowed place libbar.
			III BIII INNE VEL SVBI		Hva alar du dersom du ikke vet?	OII UU TESPUIS UAVIETIBIB AV UIT UU VEL SVATEL EIRET IAKET
			Sielden	-		
			Aldri			
		Respondere - hvordan		46 b)	Varierer mâten du responderer pâ? F.eks. Kommenter, liker, sender de DM?	
			Kommenterer			
			Sender DM	9		
		Uopprordret deling	Offe	40	Hender det at du uopptordret deler informasjon/kunnskap med en kollega?	
			Selden			
	Andres delinesaktivitet	Respondere - hvor ofte får du svar	Altid	42	Hvordan opplever du at den generelle responsen er når noen deler kunnskap?	
	П		Ofte			
			Sjelden			
		Respondere - hvordan	Liker / reagerer	42 b)	På hvilken måte responderer andre? (kommentarer, likes, DM )	
			Kommenterer			
	Fneaslement	Seminarer/foredrae	NO.	47 h)	Hvordan er deltakelsen i frivillise arrangement/seminar/foredrae (hvor krinnskan deles)?	
			Middels		וונטן ממנו כן מבינמטיקיבו וונונווסף מן מנוסקיבו בוונונים ליבונונים ליבונים מוויים מחווים מווים מחווים מווים מוו	
			Lavt			
	Lederens rolle	Som rollemodell		36	Opplever du at lederne i "bedriften" er aktive kunnskapsdelere?	
Dadle heak as alattform		Som motivator		35 b)	Opplever du en direkte forventning fra din leder om å dele kunnskap?	
	Brikenennlighet	Finns from till knonskan		20+26	Hvordan opplever du brukervennlicheten til de ulike plattformene?	Hvilken kanal foretrekker du å bruke?
		Dele/legge inn kunnskap				
		Ha samtaler				
	Brukere	Hvem	Ledere			
		Antall	Ansatte	25+26	Hvordan er aktivitelen på de uilke plattformene?	Hvilken kanal foretrekker du å bruke?
					the second state of the se	
	Formāl	Faglig utveksling Social utvakellog		18	Jeg ser at bedritten din bruker litt ulike kanaler. Hwike tormal har de ulike?	
		Informasionskanal (enveis)				
	Nytteverdi	Bra		19	Hvordan opplever du nytteverdien til systemene?	
		Ok		Ц		
		Därlig				
Grunner til a ikke dele						
	Fagkompetanse	Ja		38 b) og 39	Når vi er inne på kompetanse, føler du deg faglig trygg?	Opplever du â ha et svar nâr noen spør deg om noe?
		Delvis				
		Nei				
	I au montrionates					
		Usikkerhet / nøling		45	Hva kan være grunner til at noen nøler med å publisere innlegg eller svare på ånne spørsmål?	
		USINKuring J. Harring		2	TIVE KALL VACIO & SAME SE UN INVESTIGATION OF PRINCIPAL CONTROL CONTROL OF THE OPEN SPECIAL SP	

			-		
Dive	Diverse (hvorfor ikke dele)		45 b)	Ser du noen grunner til å ikke dele av sin kunnskap?	
		Konkurransemiljø			
		Mangel på tid			
		Vet ikke hvem man skal spørre			
Verdien av å dele					
	4				
luks	synet pa KD				
		Andres syn	47	Hvordan blir det sett pa av dine kollegaer a dele kunnskap?	
		Ditt eget syn	28 + 35 D)	Kan du renektere litt rungt verdien av kunnskap og kunnskapsdeling i din organisasjon?	Forventer du  at lederen din skal dele av sin kunnskap?
		Organisasjonens syn	CC	i nvirken grad opprever do at det er norventet a dete kunnskap?	
Find	Fnasciament				
		Oppmøte på arrangement	47 b)	Hvordan er deltakelsen i frivilliæ arrangement/seminar/foredrag (hvor kunnskap deles)?	
		General delinesaktivitet	(0	former description and Section of the section of th	
deles		College of			
Ruth	utiner		24	Hvilke rutiner har dere for å legge inn eller dele kunnskap på disse plattformene?	
		Etter kurs	24 p)	Deler du for eksempel kunnskap etter å ha vært på et kurs?	
		Oppdateringer	24 c)	Rutiner for oppdatering?	
Erfa	aringer		41	I hvilken grad deler dere erfaringer i din organisasjon?	
		Gode			
		Dårlige	41 b)	Hvordan deles dårlige erfaringer?	
			41 c)	Hvordan lærer dere for eksempel av fell?	
Motivasjon					
Inse	sentiver				
		Økonomiske	32 b)	Gis det for eksempel belønning?	
		Karriere (opprykk)	33	Blir din/ansattes grad av kunnskapsdeling målt på noe vis?	
		Karrriere (div. fordeler, eks.prosjekt)	34 b)	Påvirker det hvlike muligheter man får, for eksempel tildeling av prosjekter og arbeidsoppgaver?	
				the first of the f	
Ane	Anerkjennelse		37	HVIIKE TOTMET TOT ANETKJENNEISE BIS III DE SOM DEIET KUNNSKAP?	
		Fra medarbeidere			
		rid leuei			
		Som ekspert			
Divid	Diverse (hynrfor dele)				
	(2)20 (2)20 (2)	Fordeler	30	Hullke fordeler kan di nannå av å dele av din krinnskan?	
		Synlighet	34	Kan du si noe om hetvolningen av å være svolle internt i greanisasionen?	
		Pliktfalalse / alansidiahatsnorm	30 h	National and the motifact the following the following interests of the part of the part of the contract of the part of the par	
		Forventning	35 b)	Ondever du en direkte forventning fra din leder om å dele kunnskan?	
		Sir dea alada	(none	מאוריברי ומינים וויינים ביו מוויינים וויינים וויינים מינים מ	
2		on deg grene			
Digit	Digital kompetanse		38	Kan du fortelle litt mer om hvordan du vurderer din digitale kompetanse?	
		Bra			
		Meget bra			
Digi	Digital atferd				
		Aldersforskjeller			
		Individuelle forskjeller			
Relevans /informativeness					
Støy	,		21	Deles det mye "støy"?	
		Sosial info			
		Urelevant faglig info			
	-				
Nyti	Nytteveral	Kunneban fra bollogaer	33	Hunrian and aver du relevancen ( mutteverdien av kunnskanen du får fra dine kolleeaer?	
		Notice and the source of the s	67	Invoiden Opperen du televansen/ nytteverdien på kunnskapen som ligger ute Hvordan opplever du relevansen/nytteverdien på kunnskapen som ligger ute	
		Kunnskap på plattform / kanal	19 b)	på de ulike plattformene?	

# **Appendix E: Codebook Torstein**

	Koder
Anerkjennelse	Former for anerkjennelse som gis for kunnskapsdeling.
Arbeidsoppgaver	Informantens arbeidsoppgaver.
Arenaer for kunnskapsdeling	Hvilke kunnskapsdelingsarenaer har organisasjonen? Mer generelt enn de konkrete digitale systemene.
Barrierer for å dele	Faktorer som gjør at man nøler med å dele.
Belønning	Retningslinjer/praksis for belønning av
	kunnskapsdeling.
Effektivitet	Litt samme som tid/mulighet, men mer forventninger om effektiv utførelse av arbeid. Hvordan det påvirker kunnskapsdeling.
Eksempler	Informanten lister opp eksempler
Engasjement	Opplever informanten engasjement for kunnskapsdeling
3	blant kollegaer i sin organisasjon? /er engasjert selv
Erfaringsdeling	Hvordan/i hvilken grad erfaringer deles og læres av i
	organisasjonen. Benytte andres erfaringer. Spare tid,
	slippe å finne på ting på nytt. Læres det av feil/tabber?
Fakturering	Timeføring, fakturering, lønn, budsjett. Kundeoppdrag. Økonomisk logistikk. Lønnsomhet.
Fellesskapsfølelse	Følelse av fellesskap, kultur, respons. Å være et lag,
renesskapsiøieise	hjelpe hverandre og spille hverandre gode.
Forventning	Hvordan forventninger fra organisasjonen om å dele
1 or voluming	kunnskap merkes eller kommer til syne.
Gjenbruke ressurser	Gjenbruke tidligere arbeid, ressurser, kollegaers
	kompetanse. Effektivitet.
Holdninger	Hvilke holdninger/ innstillinger informanten har til kunnskapsdeling.
Initiativ	Informanten beskriver hvordan de selv tar initiativ i
	arbeidshverdagen. Til kunnskapsdeling,
	kompetanseutvikling osv.
KPI, mål	Måling, monitorering, rangering, KPI for
	kunnskapsdeling. Kriterier. Medarbeidersamtaler.
Kultur	Beskrivelser av kulturaspekter for kunnskapsdeling i
	organisasjonen. Hvordan organisasjonskulturen er og
Vymaskan sam fanavinnan	jobbes med. Ten av kvyngsken. Overflad. Falls som fordeten
Kunnskap som forsvinner	Tap av kunnskap. Overflod. Folk som forlater organisasjonen og tar kunnskap/ressurser med seg.
Nøle med å dele	Grunner informanten ser til å la være å dele bestemt
Typic filed a dolo	informasjon, eller holde kunnskap tilbake.
Nytte av andres kunnskap	Nytte/relevans på ressurser man mottar fra andre.
Oppfordring	På hvilken måte oppfordrer organisasjonen de ansatte til
	å dele kunnskap? Oppfordring mellom kollegaer.
Opplæring	Hvordan fungerer opplæring i organisasjonene?
	Opplæring i bruk av systemer, støtte av systemer til
	opplæring i arbeidsoppgaver osv.
Sitater	Potensielle sitater til oppgaven.

Synlighet	Betydning, effekter og konsekvenser av å være synlig
	eller mindre synlig internt i organisasjonen.
Terskel	Beskrivelser av terskelen for å dele eller spørre etter
	kunnskap, og hvorfor.
Tid, mulighet	Tid, ressurser, mulighet, anledning til å delta i
	kunnskapsdelingsaktiviteter. Timeføring, frivillig
	deltakelse. Engasjement.
Utfordringer	Utfordringer ved å få til god kunnskapsdeling og kultur
	for denne. Sette av tid. Få folk til å bidra. Terskel.
	Overflod av informasjon, for mange kanaler. Manglende
	tro på egen kompetanse.
Verdi av kunnskap	Kunnskap som grunnlaget for konsulentorganisasjoners
	arbeid. Gjenbruke ressurser. Betydningen av kunnskap
	og kunnskapsdeling.
Å bli spurt	Beskrivelser av situasjoner der informanten eller andre i
	organisasjonen blir spurt om å dele av sin kunnskap.
Å dele	Beskrivelser av egne tendenser til å dele eller ikke.
Å gjøre feil	Informanten snakker om hvordan det å gjøre feil
	håndteres i organisasjonen. Hvordan man bruker feil til
	å lære.
Å spørre andre	Situasjoner hvor informanten spør andre.

Databehandling	
Databehandling	Hvordan blir forskjellig datamateriale behandlet i organisasjonen? Retningslinjer, opplæring, praksis.
Rutiner	Rutiner for kunnskapsdeling, evt. opplæring.
Tilgang	Tilgangsstyring til ulike typer data. Konfidensialitet.
Kompetanse	
Andres kompetanse	Oppfatning og opplevelse av kollegaers kompetanse. Oversikt over andres kompetanse. Hjelpsomhet, bidrag, interaksjon.
Kompetanseutvikling	Hvordan kompetanseutvikling foregår og andre fasetter rundt det. Intensjoner rundt kompetanseutvikling. Personlig og kollektiv kompetanseutvikling.
Oppfatning av egen kompetanse	Oppfatning, opplevelse og vurdering av egen kompetanse og evne til å bidra.
Systemer	
Digital respons	Hvilken form digital respons og interaksjon tar. Hvordan en selv svarer og svar fra kollegaer. Hvordan man svarer for å gjøre ressurser tilgjengelige for andre.
E-post	Beskrivelser av hvordan bruk av e-post foregår i organisasjonen.
Finne tilbake til	Hvordan man finner tilbake til kunnskap, ressurser, korrespondanse osv. gjennom f.eks. søk. Hvordan ressurser lagres eller arkiveres for å være tilgjengelige senere. Hvordan man interagerer digitalt for å gjøre

	ressurser tilgjengelige for flere. Overflod av
	informasjon.
Gammel, tidligere organisering	Beskrivelser av tidligere strukturering og organisering.
	Forklaring av bakgrunnen for nyinnføringer.
Intranett, CV, annet	Løsninger for intranett og CV-databaser og hvordan
	disse benyttes. Evt. andre digitale systemer som bare
	brukes/nevnes av få informanter/få ganger.
OneDrive	Beskrivelser av hvordan bruk av OneDrive foregår i
	organisasjonen.
Relevans, nytteverdi	Relevans, nytteverdi og brukervennlighet av de digitale
	systemene. Oppfyller systemet behov og hensikt?
	Funksjonalitet.
Sharepoint	Beskrivelser av hvordan bruk av Sharepoint foregår i
_	organisasjonen.
Slack	Beskrivelser av hvordan bruk av Slack foregår i
	organisasjonen.
Teams	Beskrivelser av hvordan bruk av Teams foregår i
	organisasjonen.
Varslinger, støy	Opplevelser av støy, varslinger og notifikasjoner.
	Overflod av informasjon. Relevansen til informasjonen
	som deles.
Yammer	Beskrivelser av hvordan bruk av Yammer foregår i
	organisasjonen.

# **Appendix F: Approval From Sikt**

### Referansenummer

252102

# Vurderingstype

Automatisk

#### **Dato**

03.02.2023

### **Prosjekttittel**

Masteroppgave om kunnskapsdeling

# Behandlingsansvarlig institusjon

Universitetet i Oslo / Det samfunnsvitenskapelige fakultet / Institutt for sosiologi og samfunnsgeografi

# **Prosjektansvarlig**

John Nathaniel Parker

#### Student

Torstein Nygaard Vehusheia

# **Prosjektperiode**

01.01.2023 - 01.08.2023

# Kategorier personopplysninger

Alminnelige

# **Lovlig grunnlag**

• Samtykke (Personvernforordningen art. 6 nr. 1 bokstav a)

Behandlingen av personopplysningene er lovlig så fremt den gjennomføres som oppgitt i meldeskjemaet. Det lovlige grunnlaget gjelder til 01.08.2023. Meldeskjema

# **Grunnlag for automatisk vurdering**

Meldeskjemaet har fått en automatisk vurdering. Det vil si at vurderingen er foretatt maskinelt, basert på informasjonen som er fylt inn i meldeskjemaet. Kun behandling av personopplysninger med lav personvernulempe og risiko får automatisk vurdering. Sentrale kriterier er:

- De registrerte er over 15 år
- Behandlingen omfatter ikke særlige kategorier personopplysninger;
  - Rasemessig eller etnisk opprinnelse
  - Politisk, religiøs eller filosofisk overbevisning
  - Fagforeningsmedlemskap
  - Genetiske data
  - Biometriske data for å entydig identifisere et individ
  - Helseopplysninger
  - Seksuelle forhold eller seksuell orientering
- Behandlingen omfatter ikke opplysninger om straffedommer og lovovertredelser

- Personopplysningene skal ikke behandles utenfor EU/EØS-området, og ingen som befinner seg utenfor EU/EØS skal ha tilgang til personopplysningene
- De registrerte mottar informasjon på forhånd om behandlingen av personopplysningene.

# Informasjon til de registrerte (utvalgene) om behandlingen må inneholde

- Den behandlingsansvarliges identitet og kontaktopplysninger
- Kontaktopplysninger til personvernombudet (hvis relevant)
- Formålet med behandlingen av personopplysningene
- Det vitenskapelige formålet (formålet med studien)
- Det lovlige grunnlaget for behandlingen av personopplysningene
- Hvilke personopplysninger som vil bli behandlet, og hvordan de samles inn, eller hvor de hentes fra
- Hvem som vil få tilgang til personopplysningene (kategorier mottakere)
- Hvor lenge personopplysningene vil bli behandlet
- Retten til å trekke samtykket tilbake og øvrige rettigheter

Vi anbefaler å bruke vår mal til informasjonsskriv.

# Informasjonssikkerhet

Du må behandle personopplysningene i tråd med retningslinjene for informasjonssikkerhet og lagringsguider ved behandlingsansvarlig institusjon. Institusjonen er ansvarlig for at vilkårene for personvernforordningen artikkel 5.1. d) riktighet, 5. 1. f) integritet og konfidensialitet, og 32 sikkerhet er oppfylt.

# **Appendix G: Information Letter**

# Vil du delta i forskningsprosjektet «Kommunikasjonsplattformer for kunnskapsdeling»

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å kartlegge hva som får ansatte til å bruke kommunikasjonsplattformer for kunnskapsdeling. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Prosjektet resulterer i en masteroppgave som leveres våren 2023.

#### Formål

Dette er et masterprosjekt hvor formålet er å undersøke hvordan kunnskapsdeling foregår i konsulentbedrifter. Kunnskap er en viktig ressurs som kan øke verdiskapningen og gjøre organisasjoner mer konkurransedyktige. Ved tidlig kartlegging av tematikken, observerte vi et gjennomgående ønske og behov for bedre utnyttelse av kunnskap. I dag foregår en stor del av kunnskapsdelingen gjennom digitale kommunikasjons- og delingsplattformer som Teams, Slack, Workplace o.l. Av den grunn vil fokuset i dette prosjektet dreie seg om kunnskapsdeling gjennom slike plattformer.

#### Hvem er ansvarlig for forskningsprosjektet?

Universitetet i Oslo, ved John Nathaniel Parker, er ansvarlig for prosjektet.

#### Hvorfor får du spørsmål om å delta?

Utvalget for denne studien består av ansatte i konsulentbedrifter. Vi rekrutterer informanter som jobber med rådgivning innen fagfelt som ledelse, organisasjonsutvikling, endring, HR, IT o.I.

Noen av informantene er rekruttert gjennom et tidligere prosjekt, gjennomført i samarbeid med AFF, våren 2022. For rekruttering utover dette, har vi benyttet eget nettverk og snøballmetoden.

#### Hva innebærer det for deg å delta?

Dersom du takker ja til å delta i prosjektet, vil vi avholde et intervju med varighet på omtrent én time. I intervjuet vil vi spørre om hvordan du opplever kunnskapsflyten i din jobbhverdag, og be deg komme med eksempler. Dine svar vil dokumenteres ved hjelp av lyd- eller videoopptak, samt notater.

I forkant av intervjuet vil du få tilsendt en spørreundersøkelse, som vi ber deg fylle ut før intervjuet. Dette er en kort undersøkelse for å kartlegge bakgrunnsinformasjon.

### Det er frivillig å delta

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

### Ditt personvern - hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

Opplysningene om deg blir kun behandlet av masterstudentene som gjennomfører prosjektet. Dine personopplysninger vil erstattes med en kode som lagres adskilt fra øvrige data. Datamaterialet blir lagret i universitetets krypterte server frem til fullført masterstudium, ut juli 2023.

Vi vil publisere hvilke bedrifter som har deltatt i prosjektet, men din identitet vil anonymiseres, og vi sørger for at dine svar ikke vil kunne gjenkjennes eller knyttes til din bedrift.

#### Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes?

Prosjektet vil etter planen avsluttes 31.07.2023. Etter prosjektslutt vil hele datamaterialet med dine personopplysninger slettes.

### Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Universitetet i Oslo har Sikt – Kunnskapssektorens tjenesteleverandørs personverntjenester vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

### Dine rettigheter

Med vennlig hilsen

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

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

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

- Universitetet i Oslo ved Torstein Nygaard Vehusheia (torstenv@uio.no)
- Universitet i Oslo ved Seri Bjelland (<u>serib@uio.no</u>)
- Universitetet i Oslo ved John Nathaniel Parker (j.n.parker@sosgeo.uio.no)
- Vårt personvernombud: Roger Markgraf-Bye (<u>personvernombud@uio.no</u>)

Hvis du har spørsmål knyttet til vurderingen av prosjektet som er gjort av Sikts personverntjenester ta kontakt på:

• Epost: personverntjenester@sikt.no, eller telefon: 53 21 15 00.

John Nathaniel Parker (Forsker/veileder)	Seri Bjelland Torstein Nygaard Vehusheia (Studenter)
Samtykkeerklæring	
Jeg har mottatt og forstått informasjon om prosjektet S fått anledning til å stille spørsmål. Jeg samtykker til:	osial motivasjon for kunnskapsdeling, og har
<ul><li>å delta i intervju</li><li>at navnet på din bedrift publiseres i oppgaven</li></ul>	
Jeg samtykker til at mine opplysninger behandles frem	til prosjektet er avsluttet.
(Signert av prosjektdeltaker, dato)	