Using Enterprise Social Networks for Internal Communication

A Case Study about Organisational Actors’ Experience
Acknowledgement

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Abstract

Internal communication is a subject increasing in importance. This subject has, as many other things, been influenced by the Internet-based and connected world that we live in today. As a result, Enterprise Social Networks has appeared as a tool for organisations to use. While the usage of this tool is growing, the existing research on the subject is yet very limited. So is the research on employees’ needs when it comes to internal communication. In this study, we aim to fill these gaps, by exploring the use of these enterprise social networks from an organisational actor's perspective. In order to fulfil this purpose, a qualitative case study within multiple embedded units of analysis was used. The empirical material was gathered through in-depth semi-structured interviews as well as observations. Furthermore, we took on real-life experience by using the ESN tool ourselves. Several themes were then identified using a thematic analysis. By using this method, we conclude that organisational actors use ESNs for private, public and remote communication. We also provide the reader with five characteristics of ESNs that are perceived as important by organisational actors, namely; easy to learn, easy to use, accessible, informal and avoids disturbance. Several perceived outcomes resulting from ESN usage is then identified. We conclude the study by explaining that if organisations identify a need for an ESN, use it in the right way, and have the appropriate culture, the implementation of an ESN can be very beneficial. This, as organisational actors experience it as a good tool for internal communication.
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1. Introduction

In this chapter, we provide the background to enterprise social networks (ESNs). In order to do so, we discuss the Internet era as well as internal communication, and by linking these two subjects together, we arrive at ESNs. ESNs are introduced to the reader, as well as the existing gaps in research and why it is an important subject to study. Through this, we arrive at our research purpose and questions. In the end, delimitations, definitions and abbreviations that are important to know about are presented, and the structure of this thesis is outlined.

1.1 Background

The Internet Era

In 2012, an American journalist who was tired of constantly being online was paid by The Verge magazine to stay off the Internet for a year and to, when one year has passed, report his findings (The Verge, 2013). The experiment was made in order to test assumptions such as “the Internet makes people lonely and/or stupid”. When one year had passed the journalist did not feel better and disagreed with the assumption that the Internet makes you lonely. He had then realised that the Internet is “where people are”, and staying off the Internet made him miss out on, for instance, Skype sessions with his family. After one year offline, he concluded that one should embrace the Internet as it connects us to people, but that it is, however, important to find the right balance. The journalist’s experience illustrates how much the Internet affects our lives today, and how it helps us stay connected to people.

Social media is one type of technology that is seen as a part of the Internet evolution, and which allows us to use the Internet for information sharing as well as to collaborate in an online setting (Van Looy, 2016). Social media can be defined as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 that allow the creation and exchange of User Generated Content” (Kaplan and Haenlein, 2010, p.61). Popular forms of social media include social networks, blogs, and media-sharing sites, and what these tools have in common is that they have two-way, interactive, personal and relational features (El Ouirdi, El Ouirdi, Segers & Henderickx, 2014). Different tools have different purposes, and a number of infographics of different activities will appear if typing “social media explained” in a search engine. An example is illustrated in Table 1, making it clear that we can share almost anything from our daily lives on social media today.
According to Turban, Bolloju and Liang (2011), social media affects not only how people live, but also how they work. Organisations can now use social media for work-related purposes such as advertising, employer branding, crowdfunding, knowledge sharing, and more importantly with regards to the theme of this study; internal communication (Van Looy, 2016).

**Internal Communication**

Before the twenty-first century, communication was mainly used by organisations to create trusted, long-term relationships with external stakeholders (Argenti, 2003). However, managers have more recently begun to realise that employees need the same kind of attention as they have more to do with the company’s success than any other stakeholder, resulting in a greater focus on internal communication (IC). Kalla (2005, p.204) defines internal communication as “*all formal and informal communication taking place internally at all levels of an organisation*”. Hence, it covers both vertical (up- and downward) as well as horizontal (between colleagues) communication. IC is crucial as it connects and coordinates all activities by managing the employees (Holá, 2012). If it is done successfully it can enhance social capital (King & Lee, 2016), employee engagement (Karanges, Johnston, Beatson & Lings, 2015) and organisational identification (Smidts, Pruyn & Van Riel, 2001). IC has traditionally taken place face-to-face or in channels such as printed media, e-mails and phone calls (Crescenzy, 2011; Smith & Mounter, 2008). However, far more alternatives are now available for organisations.

**Enterprise Social Networks**

Enterprise social networks (ESNs) are an example of a new communication tool that has emerged as a result of the Internet and especially social media. An ESN is a web-based

<table>
<thead>
<tr>
<th>Social Media Platform</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>TwitterTM</td>
<td>I’m eating a #cookie</td>
</tr>
<tr>
<td>LinkedInTM</td>
<td>My skills include eating a cookie</td>
</tr>
<tr>
<td>SpotifyTM</td>
<td>Now listening to “cookies”</td>
</tr>
<tr>
<td>YouTubeTM</td>
<td>Here I am eating a cookie</td>
</tr>
<tr>
<td>PinterestTM</td>
<td>Here’s a recipe for making cookies</td>
</tr>
<tr>
<td>Google+TM</td>
<td>I’ve joined a circle of cookie-eating enthusiasts</td>
</tr>
<tr>
<td>FlickrTM</td>
<td>Every photo ever taken of cookies</td>
</tr>
</tbody>
</table>

*Table 1. Social media via cookies.*
platform that allows workers to communicate with each other by sharing information in an online setting at any time or place (Leonardi, Huysman & Steinfield, 2013). Organisational actors can communicate with a specific co-worker, or broadcast messages to everyone in the organisation, allowing people to share knowledge and learn from each other. As working in different locations and even different time zones is becoming increasingly popular among organisations, so is the use of these Internet-based communication channels (Avolio, Kahai & Dodge, 2001; Bell & Kozlowski, 2002), and new mobile apps such as Workplace by Facebook, Yammer, and Slack are constantly showing up in the “ESN space” (Lunden, 2015).

Although organisations are starting to recognise the benefits of communicating through ESNs, there is still a lack of research about this modern channel (Leonardi, 2014), and a research gap for understanding the use of ESNs is identified by Choudrie and Zamani (2016). Furthermore, the importance of IC has been recognised by managers for long, but it has been seen from a management perspective rather than an employee perspective (Ruck & Welch, 2012). This is echoed by Uusi-Rauva and Nurkka (2010, p. 303), who state that “little research has focused on finding out what employees consider important in the internal “expert communication process“”. To study what employees prefer when it comes to communication channels and content is, however, required in order to be able to meet employees’ needs (Welch & Jackson, 2007). Hence, this thesis aims at filling these gaps by focusing on the use of ESNs and how different organisational actors’ experience this usage. This, in order to provide organisations with information about how to best utilise these communication tools.

1.2 Purpose and Research Questions

The purpose of this thesis is to explore organisational actors’ use and experiences of Enterprise Social Networks for internal communication. Based on this purpose, the research questions (RQ) addressed in this study are as follows:

RQ1: How do organisational actors use Enterprise Social Networks for internal communication?

RQ2: What are organisational actors’ experiences of Enterprise Social Networks for internal communication?
1.3 Delimitations of the Study

We delimit our study by focusing on organisations operating in Sweden. As we are based in Sweden, we believe that this makes it easier for us to get access to participants. Furthermore, Swedes’ are often early adopters of new technologies and, therefore, a population upon which international companies often test their products (Gaitzch, 2016). Hence, we argue that Sweden is a good context for this particular study.

Another delimitation that we do in this study is to focus solely on one of the ESNs available today, namely Slack. This decision is taken as we want to get an as in-depth understanding as possible with the resources at hand.

1.4 Definitions

In this section, we define some of the terms that are used in this study. These definitions are not explained elsewhere in the report but are of high importance in order to interpret the study in the right way.

Managers: in this study, the term managers involve the organisational actors working in an organisation and that hold some kind of leading position.

Employees: in this study, the term employees involve all organisational actors working in an organisation and that do not have a leading role.

Organisational actors: when using the term organisational actors, we refer to both managers and employees.

1.5 Abbreviations

IC: Internal Communication

ESN: Enterprise Social Network
1.6 Structure

Chapter 1: Introduction

- In this chapter, we provide the background to enterprise social networks (ESNs). In order to do so, we discuss the Internet era as well as internal communication, and by linking these two subjects together, we arrive at ESNs. ESNs are introduced to the reader, as well as the existing gaps in research and why it is an important subject to study. Through this, we arrive at our research purpose and questions. In the end, delimitations, definitions and abbreviations that are important to know about are presented, and the structure of this thesis is outlined.

Chapter 2: Frame of Reference

- This chapter presents the theoretical framework that this thesis is built upon. We begin with a discussion of corporate communication, leading us to internal communication. Different communication channels are discussed, and a thorough discussion about ESNs is provided. We end this chapter by identifying knowledge gaps within the current literature, and provide a model that will later be used as the process of this study continues. For information regarding how the frame of reference has been conducted, we refer to Appendix 1.

Chapter 3: Methodology & Method

- In this chapter, we provide the reader with information about how the study is conducted. It presents the philosophy of the researchers as well as the research approach chosen to fulfill the purpose of the study and answer the research questions. Strategies and techniques used during the process are discussed, and the reasons behind these decisions are highlighted. The quality of the research is critically discussed and the ethical considerations are outlined.

Chapter 4: Empirical Findings

- This chapter presents the empirical data that has been collected for this study. We begin with a demonstration of the case, presenting secondary data as well as the primary data conducted from our observations and our first-hand experience. The data that has been collected through in-depth semi-structured interviews is then presented. We end the chapter by providing the reader with several tables summarising the data.

Chapter 5: Analysis & Conclusion

- In this chapter, we present the seven themes that have been identified using a thematic analysis. Theories and concepts introduced in the frame of reference are used to explain the findings and we conclude each theme by stating how they contribute in answering our research questions. A discussion of different viewpoints between managers and employees is also done within the themes in which such differences are identified. We end the chapter by providing concluding remarks and expanding the model that was introduced in the frame of reference.

Chapter 6: Discussion

- This chapter begins with a discussion of some of the findings that have not been covered in the analysis as they do not directly relate to the research questions, but that may still be interesting for the reader to gain knowledge about. We continue by discussing what theoretical, practical as well as societal implications our findings may have. The chapter will end with a section outlining limitations of the study and suggestions for future research.
2. Frame of Reference

This chapter presents the theoretical framework that this thesis is built upon. We begin with a discussion of corporate communication, leading us to internal communication. Different communication channels are discussed, and a thorough discussion about ESNs is provided. We end this chapter by identifying knowledge gaps within the current literature and provide a model that will later be used as the process of this study continues. For information regarding how the frame of reference has been conducted, we refer to Appendix 1.

2.1 Corporate Communication

There exist many different interpretations of the term communication (Fiske, 2010). A simple definition of the term is social interaction through messages. Belasen (2007) states that communication involves the exchange of purposeful messages between two or more parties, called senders and receivers. Senders are the ones creating the message while receivers are the ones receiving it. As the receivers obtain the message they can, in turn, become the sender, by for example asking for more information. Hence, there exist overlaps in the communication roles where both parties can record, inform, reinforce or challenge the intent of the message. The communication process involves the sender’s encoding (where one expresses the thoughts one wants to transfer) and the receiver’s decoding (where one interprets the message). The communication process is effective when encoding and decoding are in sync and the message is received and understood correctly (Belasen, 2007; Spence, 1994). Kalla (2005, p.304) define effective communication as “an interactive two-way communication process resulting in an action or decision (even if it is not the intended action or decision); effective communication can be distinguished from communication (two-way exchange of messages without action), and informing (one-way sending of messages)”. With the definitions of communication and effective communication at hand, we conclude that communication is about interaction through messages, while for effective communication to occur, this message has to be understood and result in an action or decision.

According to Argenti (2003), almost everyone had become aware of the importance of communication as we moved into the twenty-first century. This is partly due to that we are currently living in a world where information can travel fast from one area to another as a result of technological advancements such as the Internet. It is important for organisations
to note that as the information travels fast through technology-based communication tools, the risk for information overload increases (Sloboda, 2010). This means people receive more information than they can effectively handle and might, therefore, miss messages intended for them. Furthermore, the general public is nowadays more aware and sophisticated in its approach to organisations, as people tend to be more educated about different matters and more critical to business intentions (Argenti, 2003). This puts a pressure on organisations to communicate correct and valuable information, both externally and internally. As time has passed, companies have also become more complex which requires a more coherent communication strategy in order to keep track of the different departments and activities within a firm.

External communication is an essential part of a company’s communication strategy (Holá, 2012). Information from the market is used for analysing opportunities and threats and for determining the company’s strategy, while sending out information to the market is important as it informs customers about the company’s products and services. Argenti (2003) argues that managers have previously put their focus on this kind of communication. Omilion-Hodges and Baker (2014) agrees, stating that many organisations work hard and dedicate a lot of resources on creating trusting long-term relationships with external stakeholders.

Compared to the resources spent on creating relationships with external stakeholders, far fewer organisations spend an equal amount of time and money on creating lasting relationships with their internal stakeholders (Argenti, 2003; Omilion-Hodges & Baker, 2014). However, during the twenty-first century, managers have begun to realise that employees need the same kind of attention as they have more to do with the company’s success than any other stakeholders (Argenti, 2003). This is partly due to the fact that more employees are well-educated with higher expectations on their careers and the company that they work for today, compared to previous decades. As a result, the interest in fostering internal relationships within organisations has increased, something that can be achieved through the use of internal communication (IC).
2.2 Internal Communication

2.2.1 What is Internal Communication?
As with the term communication, IC can be defined in several different ways. Cornelissen (2014) says that IC involves all approaches that an organisation use to communicate with their employees, with the purpose of getting them to comply with different organisational policies and practices and/or assisting them to perform better. Bovée and Thill (2000, p.7) define internal communication as “the exchange of information and ideas within an organisation”. According to Friedl and Verčič (2011), IC has two main roles. Firstly, it should be used to deliver information. Secondly, it should create a sense of community within the organisation. According to Welch (2013), IC can vary from informal chat and gossip in the office to more formal corporate communication to all organisational actors. A definition that we argue covers these opinions is the one established by Kalla (2005, p.304), stating that it is “all formal and informal communication taking place internally at all levels of an organisation”. Hence, this is the definition that is used in this study, implying that we look at both vertical (up- and downward) as well as horizontal (between colleagues) communication taking place within an organisation.

Internal Communication Matrix
Welch and Jackson (2007) have taken a stakeholder approach to broaden the IC concept and developed a matrix called the Internal Communication Matrix. They distinguish between four different dimensions of IC (see Table 2). These dimensions are created according to stakeholders’ different structural levels in an organisation and their way of communicating internally. This is done by separating internal stakeholders into five categories; (1) all employees, (2) strategic management, including for example CEOs and senior management teams, (3) day-to-day management, including for example supervisors and line managers, (4) work teams, such as teams within a specific department or division, and (5) project teams, for example a team working on a specific event. The matrix includes which direction the communication flows within the dimensions, distinguishing between one-way and two-way communication. It also includes examples of the content associated with each dimension, i.e. what is being communicated.
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Level</th>
<th>Direction</th>
<th>Participants</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal line management</td>
<td>Line managers/supervisors</td>
<td>Predominantly two-way</td>
<td>Line managers-employees</td>
<td>Employees’ roles and personal impact, e.g. appraisal discussions, team briefings</td>
</tr>
<tr>
<td>communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal team peer communication</td>
<td>Team colleagues</td>
<td>Two-way</td>
<td>Employee-employee</td>
<td>Team information, e.g. team task discussion</td>
</tr>
<tr>
<td>Internal project peer</td>
<td>Project group colleagues</td>
<td>Two-way</td>
<td>Employee-employee</td>
<td>Project information, e.g. project issues</td>
</tr>
<tr>
<td>communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal corporate communication</td>
<td>Strategic managers/top managers</td>
<td>Predominantly one-way</td>
<td>Strategic managers-all employees</td>
<td>Organisational/corporate issues, e.g. goals, new developments, activities and achievements</td>
</tr>
</tbody>
</table>

*Table 2. Internal Communication Matrix (Welch & Jackson, 2007)*

The first dimension, internal line management communication, relates to day-to-day management activities and occurs at every level within an organisation as, for example, senior managers answer to their CEOs as line managers (Welch & Jackson, 2007). This communication takes place vertically, as the communication flows both up- and downward between people at different levels in the organisation. The second, internal team peer communication, can be considered as employee-to-employee communication in a group setting, where discussions about different work tasks take place. The third, internal project peer communication, involves colleagues working on particular projects. The participants consist of both employees and managers as project members and, thus, involve employee-to-employee communication. Hence, as the communication takes place between employees, the second and third dimensions have a horizontal flow of communication.

The last dimension, internal corporate communication, regards communication between an organisation’s strategic managers and all employees. This is predominantly done in a downwards one-way flow of communication used by strategic managers to, for example, promote commitment, inform about new aims and create awareness of changing environments.

As seen, the dimensions developed by Welch and Jackson (2007) concern different stakeholders and different communication flow directions. In this study, we choose not to focus on a particular dimension, but on all dimensions within the matrix. This, as the
participating organisations might work with ESNs in different ways. This relates to the definition by Kalla (2005) that was mentioned earlier, as we consider IC taking place between all stakeholders and in both directions within organisations.

2.2.2 What can be Achieved through Internal Communication

Organisations are becoming increasingly aware of the fact that they need to build and maintain social relationships in order to increase employee performance and organisational competitiveness (Akdere, 2005). Chen and Huang (2007) found in their quantitative study that employees are more likely to build such relationships with each other in an organisation where the climate is characterised as communicative and cooperative. This, as such climate increases the perceived trust and communication among employees and, in turn, promotes a higher degree of knowledge sharing. A qualitative study conducted by King and Lee (2016) could conclude that IC can promote relationships, resulting in a relaxed workplace and a sense of belonging. Furthermore, if receiving information, employees will make fewer mistakes resulting in a greater trust among employees. Finally, recognition from colleagues can be facilitated by IC allowing employees to boost their self-esteem. Resulting from this, a trusting, communicating and cooperative atmosphere will be created, which, in turn, creates social capital. Bisung, Elliott, Schuster-Wallace, Karanja and Bernard (2014) states that social capital enables positive results through the development of trust among the employees. The social capital theory is about creating these favourable relationships between individuals in an organisation so that they will share common values resulting in good cooperation among the employees, benefiting the organisation as a whole (Bisung et al., 2014; Coleman, 1988). Drawing from this, IC can create social capital, which will, in turn, benefit the organisation as a whole.

The relationships created through an organisation’s IC can also foster employee engagement (Karanges et al., 2015). Employee engagement is characterised by, for example, an employee’s willingness to invest time and energy in their work and being persistent even when one faces difficulties, as well as being enthusiastic, inspired and feeling a sense of significance and pride (Schaufeli, Salanova, Gonzáles-Romá & Bakker, 2002). The study done by Karanges et al. (2015) found that employee engagement can be achieved by more frequently involving employees in discussions about their individual roles and the company’s objectives. It can also be achieved by encouraging employees to share opinion and ideas, as well as facilitating them with the ability to link their goals and values to those
of the organisation. This is supported by Welch and Jackson (2007) who say that IC helps employees to understand goals, and creates commitment and a feeling of belonging to the organisation which is vital for achieving employee engagement.

Smidts et al. (2001) state that employees should receive valuable information about what managers expect of them in their work. This increases their understanding of the company’s norms and values and, in turn, strengthens their organisational identification. Organisational identification is the extent to which an employee perceives oneself as belonging to, and being a member of the group which one is in (Ruck & Welch, 2012; Smidts et al., 2001). It has been shown to be associated with the employee’s job involvement, job performance, job satisfaction and intentions to stay in/leave the company (Ruck & Welch, 2012). The study done by Smidts et al. (2001) shows that a communication climate plays a central role in achieving and strengthening organisational identification. A positive communication climate encourages employees to be a part of decision-making, as well as actively participate in conversations about organisational issues. Additionally, an open climate may increase the employee’s feeling of self-worth as they feel they are being taken seriously. An open and attractive communication climate can significantly contribute to the long-term success of a company. Hence, organisations should pay serious attention to the IC climate and give employees sufficient information and a chance to be involved and speak out.

When used successfully, IC can also facilitate employee understanding of the company’s changing priorities, as well as promote employee awareness of different opportunities and threats (Welch, 2012). Furthermore, a field study done within two organisations by Clampitt and Downs (1993) found that IC can improve productivity. The main reasons for this were found to be that it offers personal feedback and an opportunity to communicate with co-workers.

Benefits coming from IC do not only regard downward and horizontal communication as has been the focus up until now. The arrival of the information-based, knowledge-intensive and survey-driven economy that we face today forces companies worldwide to change their relationships with employees (Bartlett & Ghoshal, 2002). A main task for organisations today is to find competent employees that can help build competitive advantage. When this has been achieved, networks must be created in which these talented employees can share
their knowledge and expertise and come with suggestions on how to improve things. This is where IC from a bottom-up perspective comes in. Tourish and Hargie (2004) discuss that upward communication can deliver significant benefits to an organisation. They mention that it can result in better decision making, enhanced participation, improved organisational learning and an increased willingness by managers to act on employees’ suggestions. It may also result in a greater tendency by employees to report feedback to managers regarding their behaviour.

A summary of the findings discussed above is provided in Table 3.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Scholars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective internal communication facilitates positive employee relationships, resulting in <em>social capital</em></td>
<td>King &amp; Lee, 2016</td>
</tr>
<tr>
<td>Relationships created through internal communication can foster <em>employee engagement</em></td>
<td>Karanges, Johnston, Beatson &amp; Lings, 2015; Welch &amp; Jackson, 2007</td>
</tr>
<tr>
<td>Valuable information of what managers expect of employees will strengthen their <em>organisational identification</em></td>
<td>Smidts, Pruyn &amp; Van Riel, 2001</td>
</tr>
<tr>
<td>Internal communication can facilitate employee understanding of company’s changing priorities</td>
<td>Welch, 2012</td>
</tr>
<tr>
<td>Internal communication can result in improved productivity</td>
<td>Clampitt &amp; Downs, 1993</td>
</tr>
<tr>
<td>Upward internal communication can result in better decision making, enhanced participation, and improved organisational learning</td>
<td>Tourish &amp; Hargie, 2004</td>
</tr>
</tbody>
</table>

*Table 3. Main benefits of internal communication*

2.2.3 Risks with Internal Communication

Although an organisation’s IC can be beneficial, it also comes with some risks. Incorrect communication is viewed to cause 60% of the problems in an organisation (Holá, 2012). It can result in passivity, frustrations, decreasing motivation, and a decrease in a person’s ability to take decisions. Poor communication can also be counter-productive and work as a threat to the relationships within the organisation (Welch, 2012). Situations in which there is a lack of good communication can result in an ineffective coordination of activities, ineffectiveness in marketing, an inability to compete, ineffective targets and strategies and a failure to reach those targets (Holá, 2012). It may also result in a higher employee turnover since the risk of employees leaving the company increases.
The study done by Holá (2012) points out some communication errors that managers often make. A common mistake involves not communicating openly with the employees. Another error is about managers not sharing the organisation’s objectives and direction with the employees, not motivating them and not assessing their contribution. Other common mistakes involve ignoring the critical voices and creating an atmosphere of fear resulting in that employees feel afraid to communicate openly and honestly. Moreover, organisations also run the risk of damaging internal relationships if they do not realise the importance of employee perception regarding the methods used for IC (Welch, 2012), something that will be discussed further in the next section.

2.2.4 Employee Perception - The Way to Reap the Benefits and Avoid Risks

For IC to be effective, organisations need to carefully consider the employees and their preferences regarding IC. According to King and Grace (2006), effective IC is dependent on employees’ willingness to engage or be receptive to the communication taking place. This is also recognised by Welch (2012), who talks about how effective IC relies on creating appropriate messages that reach employees through channels that are useful and acceptable to them. Failing to do this might damage the internal relationships. It is, therefore, important for the management to recognise that each of the different channels, which will be discussed in the next section, can come with different benefits.

According to King and Lee (2016), regardless of what communication channels are adopted by an organisation, for IC to be effective they must provide information that is perceived as accurate, relevant and useful by the employees, and provide two-way interaction. They must also be easy to access for all employees and provide network externality. Network externality refers to how many people are using a specific network and explains the positive relationship between perceived number of users of a channel and the subsequent perceived benefits that this channel will result in. According to this concept, the more people that use a channel, the greater benefits will be obtained because more information is shared among more people. The importance of employee preferences and their acceptance to the communication is also echoed by Sloboda (2012). He argues that if employees are not open to the communication being offered to them, it does not really matter what channel is being used. It will, in that case, not be effective.
To adapt IC to employee communication preferences is a challenge for managers as these preferences are rarely uniform. Workforces contain groups with different features and people with different education levels and communication needs (Cameron & McCollum, 1993), and employees may hold very different needs and preferences depending on work position and the situation (Welch and Jackson, 2007). Hence, it is not easy to find approaches acceptable to all organisational actors. What is also true is that communication channels continually evolve, as do the needs of the users, much because of the technological development. It is, therefore, always important for managers to consider the relevance of contemporary practices in regards to employee preferences (Proctor & Doukakis, 2003). This is also discussed by Schultz (2002) and Taylor (2010) who argue that when the conditions in the industry changes, it is important for communication professionals to respond by adapting their communication efforts to better fit the needs of organisations and its employees.

Some general information about preferences does, however, exist. Employees’ preferences of channels can be linked to the concept of information richness (Ruck & Welch, 2012). Rich media are personal and involve contact in the form of face-to-face communication. Media of lower richness, on the other hand, are impersonal and rely on rules, forms, procedures or databases. With this continuum of richness in mind, communicators need to match communication that is high in ambiguity with rich media channels, and communication with low ambiguity with lean media.

As mentioned, little research has focused on finding out what employees consider important when it comes to internal communication (Uusi-Rauva & Nurkka, 2010). According to Welch and Jackson (2007), more research into employee preferences regarding IC channels and content is required in order to ensure that it meets employees’ needs. This is also argued by Welch (2012) who suggests a need to explore what emotional responses different channels might provoke among employees.

### 2.3 Communication Channels

What is clear up until now is that IC can imply several benefits to an organisation, but only if it is done in the right way. A critical task for a leader or professional communicator is to decide what tools to use in order for the communication to work. And just as the reasons
for working with IC are many, so are the tools available for organisations to work with. Tools that all engage us in different ways and that affect the scale and pace of communication (Men, 2014). According to Crescenzo (2011), these channels range from traditional channels such as printed publications, phone calls, e-mails and face-to-face communication, to Web 2.0 tools such as intranets, instant messaging and internal social networking sites. We argue that a discussion about the most common communication tools is important in order for us to be able to compare and draw conclusions about ESNs later on.

2.3.1 Traditional Communication Channels

One of the most common channels that organisations have traditionally used is face-to-face. Face-to-face communication requires a physical setting by both the sender and the receiver and can be divided into two different types (Smith & Mounter, 2008). It can be either on a one-to-one basis through a personal meeting, or “en masse” when messages are to be delivered to more than one receiver. Face-to-face communication is a two-way communication channel that facilitates immediate feedback and personal focus (Crescenzo, 2011). It “enables a person to hear and see the non-verbal communication conveyed by the sender and respond with feedback straight away” (Lee, 2010, p.40). Because of these characteristics, it is often perceived as the most optimal channel for communication, especially when it comes to communicating complex information (Crescenzo, 2011), new strategies and goals, or bad news (Smith & Sinclair, 2003). However, it is not always accessible to all employees at all time (King & Lee, 2016) and it can also be time-consuming (White, Vanc & Stafford, 2010).

A two-way communication channel that offers synchronous sharing of information similar to face-to-face is phone calls (Smith & Mounter, 2008). It has got some of the same advantages and disadvantages as face-to-face communication as it, for example, facilitates immediate feedback and might be time-consuming. It offers personal focus to some extent as one can hear each other. However, a big difference between the two channels is that one cannot see each other when communicating through a regular phone call.

Printed vehicles relate to paper-based communication distribution such as newspapers, magazines, and newsletters (Smith & Mounter, 2008). Printed publications are perceived as a good way to ensure that important messages are stressed and elaborated, and are,
therefore, often used as support material for face-to-face channels. They enable getting information out to hard-to-reach groups, and they give time for reflection and feedback. They are also appropriate when communicating large amounts of information (Sloboda, 2010). A big disadvantage with these types of channels is the cost to the environment. Furthermore, print-based channels do not facilitate a dialogue (King & Lee, 2016) as it is a one-way communication tool (Sloboda, 2010), implying that the receiver can ignore the information if one wishes to do so.

Another commonly used, and often viewed as traditional, communication channel is e-mail. An electronic-driven channel that, because of its very nature, is often used as a one-to-one communication tool (Smith & Mounter, 2008). E-mails are often described as a fast and cheap channel of communication that allows for stretching information all over the world, allowing communicators to reach large audiences with minimum resources (Sloboda, 2010; Smith & Mounter, 2008). It is also, in comparison with printed communication, environmentally friendly. Disadvantages with this kind of communication channel are that not everyone may have access to the necessary technology and that you run the risk of information overload (Sloboda, 2010). Furthermore, comparing to face-to-face, e-mail is easier to misunderstand, and one may not receive an answer as fast as one would like (Smith & Mounter, 2008). There is also the risk of sharing information to external and unintended audiences.

2.3.2 Web 2.0 Communication Tools
The advent of the Web 2.0 platforms in the last decade has changed the landscape of IC (Smith & Mounter, 2008). Web 2.0 technology are platforms that are interactive, collaborative and participative (Murugesan, 2007), and they come in several different forms such as intranets and social media. While intranets will only be discussed shortly, a more extensive discussion about social media will then follow, leading us to a special type of internal social media called enterprise social networks.

2.3.2.1 Intranet
An intranet is a computer network that allows people within the organisations to share information and sometimes also communicate with each other using electronic mail and different discussion forums (Andersen, 2001; Smith & Mounter, 2008). A change in the use of intranets was noted by Radick (2011), who states that compared to before, when intranets were mostly used to connect people to information, they are currently more and
more about connecting people to people. According to Stephens, Waters, and Sinclair (2014), while workers use a wide variety of IC channels, as much as 85% are using intranets. A study conducted by Andersen (2001) showed that the use of intranets can affect organisational performance. Another study by De Bussy, Ewing, and Pitt (2004) also found that the introduction of intranets positively impacts IC by increasing transparency and enhancing information flows. Moreover, the advantages and disadvantages for intranets are much similar to those for e-mail use, as intranet use is cheap and environmentally friendly, but might cause information overload resulting in the receiver missing out on important information.

2.3.2.2 Social Media Platforms

Social media is another form of an Internet-driven communication tool that has evolved as a result of the Web 2.0 era. Social media can be defined as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 that allow the creation and exchange of User Generated Content” (Kaplan and Haenlein, 2010, p.61). Popular forms of social media include social networks, blogs, and media-sharing sites and some well-known examples are Twitter, YouTube, and Facebook. What these channels have in common is that they have two-way, interactive, personal and relational features (El Ouirdi et al., 2014).

Social media allows leaders to listen to employees, respond fast, communicate in a personal way and facilitate upward communication that allows for feedback (Men and Tsai, 2013), meaning it is a good channel for two-way communication (King & Lee, 2016). Social media usage is found to be able to enhance IC in a cost- and time-efficient manner (Denyer, Parry & Flowers, 2011), and to enable employees interaction with each other at any period of the day (King & Lee, 2016). Furthermore, attributes of social media address the deficits in other channels simultaneously, such as financial and temporally limitations of face-to-face communication and the dialogue that printed media fails to provides. As mentioned earlier in this frame of reference, network externality is an important factor to consider when deciding what channels to use. And because a lot of people spend time on social media in their private life, and that social media is a platform that can be accessed irrespective of temporal and spatial limitations, network externality is expected to be high. It has been found that, through using social media within organisations, relationship promotion and recognition is improved leading to a stronger platform on which to build social capital and improve organisational performance.
Social media usage can, however, also come with some challenges. When implementing social media into the organisation, you might face challenges such as lurking (Ridings, Gefen & Arinze, 2006), cultural fit issues (Koch, Leidner, & Gonzalez, 2013) and lack of interactivity (Larsson, 2013). Smith and Mounter (2008) also mentions that it is important not to get carried away with this kind of technology as not everyone will have access to it or feel comfortable using it for some time to come. Friedl and Verčič (2011), for example, found that even though young digital natives enjoy using digital media in their personal life they may not necessarily prefer to use it in their professional lives. Furthermore, it can present risks to employees’ careers, as it can be associated with a number of risky behaviors such as wasting time or creating offensive content (Landers & Callan, 2014).

A study conducted by King and Lee (2016), which focused on IC within the hospitality industry and included 20 semi-structured interviews with employees, showed that the employees believed that social media, as an IC tool, would benefit the organisation. The participants argued that social media would provide the opportunity to interact with each other at any period of the day resulting in quick problem-solving. This was especially viewed as important within their industry as they work 24-hour rotational shifts and have limited opportunity to interact with their managers and co-workers. Another benefit that was mentioned was that it would provide them with an accessible way of reaching out to co-workers, as social media tools are available on the phone that they carry with them. The participants believed that this would make it possible to communicate asynchronously, increasing network externality as everyone can access the channel whenever they feel they have the time. As a result, they believed that social media would promote relationships and increase recognition, thereby providing a stronger platform on which to build social capital and, hence, improve organisational performance. A model, presented in Figure 1, was created to show how this process would work.
2.3.2.3 Enterprise Social Networks

As people have started to realise that social media can benefit organisations, a new trend has emerged. Nowadays, organisations can create private social networks restricted to employees and business partner (Turban et al., 2011). As these channels are organisationally bounded and not reachable by others outside the organisation, in comparison with for example Facebook and Twitter, they belong to a specific class of social media, called enterprise social networks (ESN). Leonardi et al. (2013, p.19) defines enterprise social networks as web-based platforms which allow “workers to: (1) communicate messages with specific coworkers or broadcast messages to everyone in the organisation; (2) explicitly indicate or implicitly reveal particular coworkers 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”. Furthermore, ESNs also provide employees with a forum where they can communicate with each other publicly within the organisation (Leonardi, 2014). With that said, the main general functions of these tools are that one can communicate asynchronously with one person, and create group chats, in which one can send texts and documents to each other. A more in-depth explanation of different ESNs and how they function will be covered later in this section.

Even though organisations are increasingly beginning to use ESNs there is only little empirical research on the use of these platforms available today (Choudrie & Zamani, 2016; Leonardi, 2014). However, we can conclude that, as ESN platforms can be seen as a type of social media, many of the advantages and disadvantages that apply to social media do also apply to ESNs. Leonardi et al (2013) do, however, argue that broad business goals, such as better access to expertise and increased knowledge sharing and innovation are...
better served by internal social networks. This, as they are closed resulting in higher security. Furthermore, they argue that leaders can often reach out to more employees when using an internal communication network.

The available research on ESN suggests that employees who use the tool tend to maintain connections with colleagues whom they do not know or not communicate with on a regular basis in an offline setting (Leonardi, 2014). Moreover, ESNs may result in vicarious learning as one is passively exposed to what others are communicating about in open conversations. Furthermore, Leon, Rodríguez-Rodríguez, Gómez-Gasquet and Mula (2017) argue that the use of ESNs can be very beneficial for organisations if they are properly managed. This, as it may increase employees’ productivity and motivation, improve communication and cooperation among the organisational actors, as well as foster individual and organisational learning. Shirky (2008) states that these channels can connect groups of individuals who are not in the same physical location, and according to Qualman (2009), networked employees can be successfully involved in innovation, wealth creation and socio-economic development.

A possible problem associated with the use of ESNs is the fact that it may, in the long run, reduce employees’ direct personal interactions which may result in psychological isolation (Kane, Alavi, Labianca & Borgatti, 2014). However, Zhang and Venkatesh (2013) contradict these assumptions stating that online communication is a complement, rather than a replacement, for offline communication. Moreover, Lunden (2015) states that organisations that have implemented ESNs with the goal of making their employees collaborate more may not have been successful due to the fact that employees have not been willing to learn about yet another tool. However, the probability of a successful implementation will increase if the ESN is similar to social media tools that people are using in their private life, as it will, in that case, be easier to understand. It is also argued that if an organisation want to ensure a high adoption rate when implementing an ESN, it is necessary to create an open culture (Korzynski, 2014). To ensure control and security, they should also introduce a code of conduct.

Several ESN platforms have been developed during the last couple of years with names such as *Slack*, *Yammer*, and *Workplace by Facebook* (Lunden, 2015). A more in-depth
discussion of these tools will now follow to get a sense of how they can work. A summary of
the main functions and features is then presented in Table 4.

**Slack**

Slack was launched to the public in 2014 and has since then grown into a popular communication tool with over four million users each day (Rudic, 2016). Slack translates a modern form of communication, namely texting, into a workplace app. It has been valued to $2.8 billion, a valuation that is remarkable for its short time in business. In May 2016, 77 organisations from the Fortune 100 list were using Slack, demonstrating that it is not just an application popular among start-ups as big organisations use it too (Kokalitcheva, 2016). Williams (2015) has created a guide on how to use Slack and all its features. He says that Slack is like a chat room for the whole company, where teams can be divided into smaller channels for group discussions. A channel is a “room” for discussions, often created for a particular topic or a specific team. Besides these group messages, people can send direct messages (DM) to each other, allowing for one-to-one communication.

Slack can be used on both a mobile and desktop application, where the user receives notifications about new messages making it easy to keep up with what is going on (Williams, 2015). The user can easily manage the notifications for the different channels and messages to avoid notification overload. As with the notifications, there are many features that can be customised on Slack. One can, for example, create customised emojis and change the appearance by altering the theme and colours. A popular feature is to integrate Slack with different programs allowing people to save time. This can be done by for example integrating it with Google Calendar that then sends out notifications of upcoming meetings to a particular channel in Slack, or with Giphy, allowing people to quickly send GIFs to one another. A GIF consists of multiple images displayed in a succession to create an animated clip, often used as entertainment, statements or comments in online conversations (William, 2016). One can also build customised integrations suitable for one’s team or organisation (Williams, 2015). Other useful features include a remind function, where one can ask Slack to send a message to remind one of something, and an edit function, allowing one to change already sent messages, as well as a search function, which one can use to find previously sent messages. Furthermore, users can send files and folders, and even voice and video call each other on Slack (Rudic, 2016). The basic features just mentioned are for free. However, companies have got the option to
pay for additional features such as more storage, unlimited archived conversations, and group voice and video calls.

**Microsoft’s Yammer**

Yammer is another tool that supports real-time communication within enterprises in an online environment (Choudrie & Zamani, 2016). Yammer was launched in 2008 and had five million corporate users as they got acquired by Microsoft in 2012 for $1.2 billion (Taylor & Lunden, 2012). Similar to a Facebook feed, Yammer’s primary screen is called the News feed, where new posts appear which one can like and comment (Chacos, 2012). Groups can be created allowing for discussions relevant only to a specific team within the organisation. Conversations and posts can be shared with other groups or to a specific person through instant messages. Moreover, Yammer offers the user to share files and create Pages, which basically is a document in a group setting. Organisations can choose to integrate Yammer with different programs such as Sharepoint and SAP. Yammer also includes a search function, making it easy to find contact information for the person that one is looking for. Furthermore, one can list skills in one’s profile which also can be searchable, making it easy to find the right person for the job. Yammer can be used as a mobile application as well as on the desktop. The basic features are for free, however, monthly service fees are charged when organisations want to access more advanced group or administrative controls.

**Workplace by Facebook**

For long, Facebook has been part of people’s private lives helping us to keep in touch (Boyle, 2016). Lately, the company released a tool that they hope will make it easier to communicate in our professional lives. Entering a very competitive space including the ESN giants Slack and Yammer (Boyle, 2016), Facebook launched Workplace, formerly known as Facebook at Work, to the public in 2016 after using it internally for a couple of years and testing it with a few other organisations (Facebook Newsroom, 2016). Facebook state that they have brought the best of Facebook to the workplace, where one can communicate via groups or chats, use features such as live broadcasting and easily give feedback through the reaction feature. As expected, it includes a news feed where one can stay up-to-date with business and colleagues’ activities and it can be accessed via the web or as a mobile application (Boyle, 2016). One can share documents and videos either in private chats or in group messages. In addition to the “regular” Facebook features, the tool
provides a feature where organisations can integrate Workplace with their existing IT systems. Furthermore, Facebook have announced “Multi-Company Groups” where employees from different organisations can communicate and collaborate with each other. As a contrast to “regular” Facebook, Workplace does not feature ads. The pricing is built around a price-per-user strategy, where organisations pay only for those who are actively using the application (Boyle, 2016; Facebook Newsroom, 2016).

As many people already are on Facebook, they have used this to their advantage and kept the interface of Workplace similar to the one of “regular” Facebook (Boyle, 2016). A personal account on Facebook is not required for one to be on Workplace, as one can easily create a corporate account without even having an e-mail address. If one has got a private account, this will remain completely separate to one’s corporate account.

<table>
<thead>
<tr>
<th>Functions</th>
<th>Slack</th>
<th>Yammer</th>
<th>Workplace by Facebook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channels/Group conversations</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Direct messages with one person</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Voice and video calls</td>
<td>X</td>
<td></td>
<td>X</td>
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<tr>
<td>Group calls</td>
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<td>X</td>
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<tr>
<td>Live video streaming</td>
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<tr>
<td>Integrations</td>
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<tr>
<td>Communicate with external partners</td>
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<td>X</td>
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</tr>
<tr>
<td>News feed</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Desktop and mobile application</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
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</table>

Table 4. Summary of different ESNs functions and features.

2.4 Opportunity Gap within the Frame of References

Our frame of reference addresses the importance of internal communication, and what benefits and risks it may be related to. It also discusses the importance of considering employees’ preferences in order for the communication to work. Some of the different channels that are available for organisations to work with are covered, namely face-to-face communication, phone calls, printed channels, e-mail, intranets, social media and last but not least enterprise social networks. The last one, ESNs, is a rather new tool that has become available for organisations in recent years. Because of this, there is a lack of
existing research on this topic today (Leonardi, 2014) and a research gap for understanding ESN usage exists (Choudrie & Zamani, 2016).

In this study, we aim to fill this gap. An attempt to further explore (1) how organisational actors use ESNs as an IC tool, and (2) how this usage is experienced by organisational actors, is made. We believe that the first question is necessary to answer in order for us to answer the second question correctly. This, as we need an understanding of how the channel is used in order to be able to draw conclusions from the second question about how organisational actors experience it. Our hope is that answers to these questions in conjunction will enable us to come with suggestions for best practice when it comes to ESN usage. And as the different ESNs available differ in some ways, a choice to focus on Slack is made.

In section 2.3.2.2 about social media, a model is presented (Figure 1) showing the implications of social media usage in organisations from an employee perspective. Based on the knowledge that we have gathered, we have created a model much like this one, summarising the key points about ESN usage. Our hope is that this study will allow us to expand this model, explaining ESN usage from the perspective of organisational actors. This model will, hence, be brought up again in the analysis, hopefully with some more information.

![Figure 2. A summary of pre-existing theory regarding Enterprise Social Networks](image)
3. Methodology and Method

In this chapter, we provide the reader with information about how the study is conducted. It presents the philosophy of the researchers as well as the research approach chosen to fulfil the purpose of the study and answer the research questions. Strategies and techniques used during the process are discussed, and the reasons behind these decisions are highlighted. The quality of the research is critically discussed and the ethical considerations are outlined.

3.1 Philosophy of Research

Before deciding upon which research design and methods that were most suitable for our study, we needed to reflect upon our own view of research and research philosophy. The two of us believe that the truth is situational-based, relative and a limited experience that differs among people and that all these truths are important to acknowledge. Therefore, we are taking a relativistic ontology perspective regarding the nature of reality. By taking this philosophical perspective, we acknowledge that there exist many different truths in nature (Easterby-Smith, Thorpe & Jackson, 2015). This perspective is emphasised in our research as we incorporate unique answers from our participants to generate new knowledge. We realise that the participants may view the world differently and have many different truths, and we take all these different truths into account. Regarding our epistemology view, we follow a social constructionist approach. According to Easterby-Smith et al. (2015), the social constructivist approach describes truths as something that can be achieved and created by people, and agreements between different viewpoints have the ability to shape what is considered true. Furthermore, this perspective appreciates the different constructions and meanings that people place upon experiences and focus on what people are feeling and thinking. A constructionist would, therefore, seek to capture diverse understandings and multiple realities about people’s experiences (Patton, 2015).

According to Easterby-Smith et al. (2015), social constructionism and relativism can be linked together. They argue that when taking these approaches when conducting research, the assumption is that there may be many different realities. One should, therefore, gather multiple perspectives, preferably through a mixture of quantitative and qualitative research, and collect views and experiences of diverse individuals. Although we focus on qualitative methods only, a decision that will be discussed further in the next section, we still believe
that these perspectives are preferable for our study as we need to consider the views of different and diverse individuals regarding IC to fulfil our purpose.

By recognising our view on research philosophy as a combination of relativistic ontology and social constructionism epistemology, we could decide which research design and what methods that were most suitable for the purpose of our study.

### 3.2 Research Approach and Design

#### 3.2.1 Qualitative Research Design

In order to investigate how organisations use ESNs as an IC channel and how organisational actors experience this, the research approach applied for this study was of qualitative nature. A qualitative approach, in comparison to a quantitative, involves more open-ended questions and responses, giving the research a larger freedom (Easterby-Smith et al., 2015). Quantitative methods are suitable when wanting to study a relationship between phenomenon, whereas the qualitative approach aims at understanding the sense that respondents make of their world. We argue that a qualitative research design was appropriate to use in this study as the purpose of our study was to understand how organisations use ESNs as an IC tool and how employees experience it.

#### 3.2.2 Inductive Approach

An inductive approach was applied to this research. This is a process that is generally used for qualitative methods (Hyde, 2000), and implies that the researcher commences the study with an open mind that is not influenced by pre-studied theories (Strauss & Corbin, 1994). We argue that this approach was appropriate as the research started off with very limited information, which is why data would emerge from the empirical findings. The limited information presented in the frame of reference (see Chapter 2) functioned as a sense-making tool rather than as a tool for theory-testing. The material collected in this study will, on the other hand, be connected to the theories within the frame of reference for the purpose of validating the trustworthiness of the findings (Eisenhardt & Graebner, 2007).

### 3.3 Research Strategy

After deciding that a qualitative research design and an inductive approach would best fit our purpose, a method that would guide us in all the different stages of the research had to be decided upon. In order to do this, we needed to look carefully at our research questions
and think about where and how data would be collected as well as analysed in order for us to answer the questions. When looking at the different methods available for qualitative research, we realised that a case study would be the most appropriate choice. This, as the aim of a case study is to study a contemporary phenomenon in its real-life context (Yin, 2014), and we were to study the phenomenon of ESN usage within organisations that are currently using this type of technology.

3.3.1 Case Study Research

According to Yin (2014), a case is usually a concrete entity and can be represented by for example a person, an organisation, a program or a process. With this in mind, a choice was made to use a practice as the case in this study. Here, a decision was made to focus on only one of the ESNs available on the market today as we wanted to get an as in-depth understanding into a practice as possible. We decided to go with the ESN called Slack as one of us had previously worked with the tool and was, therefore, familiar with how it functioned. As a result, we named the case “Slack usage”.

The context under which the study was conducted was represented by “organisations currently using Slack”. Several embedded units of analysis within this context was used, reflecting different organisations. Also, to gain as much insight as possible, people from different stances in the hierarchical order, i.e. “regular employees” and people in managerial positions were studied. Here is where our constructionist view became very clear, as a constructionist evaluator would expect that different stakeholders involved in a phenomenon would have different experiences and perceptions about it (Patton, 2015). All of which are experienced as real and that deserved attention.
3.3.2 Sampling Strategy and Sample Size Consideration

When conducting a case study, it is recommended to do a theoretical sampling. Theoretical sampling means “cases are selected because they are particularly suitable for illuminating and extending relationships and logic among constructs” (Eisenhardt & Graebner, 2007, p. 27). Drawing from this, theoretical sampling means data sources are selected because they can provide good insight into a specific phenomenon. A theoretical sampling, therefore, implied that we needed to find organisations that used Slack. Only these organisations would be able to provide us with sufficient and correct information about this phenomenon.

As we were not able to find lists or information about companies using Slack, we realised that we would have to combine our theoretical sampling with convenience sampling. Convenience sampling is a non-probability sampling design described by Easterby-Smith et al. (2015, p.333) as a design where “entities are included in a sample on the basis of their ease access”. This is a common strategy for researchers because of its convenience, but a design like this does come with some disadvantages. For a non-probability sampling design like convenience sampling, it is not possible to state the probability of any member of a population being selected for the study. It is considered that non-probability sampling, and especially convenience sampling, fall short on the principle of bias, as there is no way of telling if the sample actually represents the bigger population. Because of this, researchers
need to be very careful when using this strategy. Despite this, it is still a useful sampling strategy in some situations. Although we realised that there is a risk of bias and that organisations being dissatisfied with its Slack-usage might choose not to go public with this usage, we still viewed the risk associated with using a convenience sample for this study as rather small. Especially since we did not aim to come with conclusions that represent the whole population. Hence, with theoretical as well as convenience sampling in mind, the first step of our sampling was to Google articles about Slack to see if we could find some organisations being mentioned. This resulted in information about several organisations to contact, and we found four companies that were willing to participate in our research.

In order to extend our sample, we moved on by searching for companies in Jönköping that used this application. We sent out e-mails to 30 companies located in Jönköping, 10 “superföretag”\(^1\) and 20 of the biggest companies based on the turnover during 2016\(^2\), and asked them if they were using Slack and had an interest in participating in the study. We also contacted Science Park Jönköping to see if they could provide us with any information about companies using Slack. Moving on, we also talked to people that we knew. All these strategies together resulted in two additional organisations to include in our sample. This way of searching for participants can be seen as purposive sampling, described as a process where “the researcher has a clear idea of what sample units are needed according to the purposes of the study, and then approaches potential sample members to check whether they meet eligibility criteria” (Easterby-Smith et al., 2015, p.82). The guiding principle for this kind of strategy is often a theory, as in this study, and it can, therefore, be related to theoretical sampling.

To see if we could further increase our sample size we did snowball sampling. It is a form of non-probability sampling design where participants that meet the criteria for inclusion are asked whether they know others who also meet the criteria (Easterby-Smith et al., 2015). All participants were asked whether they knew of other organisations using Slack that we in our turn could contact. This resulted in five more companies, and some of these were contacted. However, none of these companies were interested in taking part in the study.

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\(^1\) Each year “Veckans Affärer” announces Sweden's "Superföretag". The list includes limited companies in Sweden that have reached over the high standards in growth, profitability, and rate of return during the last four years (Johansson, 2016).

\(^2\) The site “Largest Companies” has gathered the biggest companies in Jönköping based on turnover (Largest companies, 2017).
After the completion of data collection from 11 participants, we realised that the same things were being said by each new participant and that nothing new was learned. Once we had reached a total number of 13 participants we had reached data saturation and concluded that no more participants were needed. To continue to reach out to the companies that we had received information about through the snowball sampling was, therefore, seen as unnecessary. This strategy is called saturation sampling, which is the process of “analyzing patterns as fieldwork proceeds and continuing to add to the sample until nothing new is being learned” (Patton, 2015, p.271).

3.4 Data Collection

3.4.1 Secondary Data
As a starting point in our data collection, we gathered secondary data about Slack from Slack’s own webpage (www.Slack.com). Secondary data is data that has been gathered for purposes other than the study in question (Easterby-Smith et al., 2015). We read different guides on how to use the tool and gathered information in order to learn about the case under study. This enabled us to better understand the participants and ask better questions throughout the primary data collection.

3.4.2 Primary Data
Primary data is data that has been specifically created for the study in question (Easterby-Smith et al., 2015), and we have taken on several approaches to gathering this kind of data. These methods will be discussed in the following sections.

3.4.2.1 First-hand Experience of Slack
We started our primary data collection by creating an account on Slack to get a first-hand experience. We downloaded the mobile application and used the tool as our main digital channel when communicating with each other throughout the work with this thesis. This was a way for us to get an even better understanding and learn about the different features that Slack offers.

3.4.2.2 In-depth Semi-structured Interviews
Another method, and also the main method, that was argued to be a good method for informing this case study were qualitative in-depth semi-structured interviews. Qualitative interviews aim at gaining understanding about the interviewee's viewpoints, and why they
hold this specific viewpoint (Patton, 2015). They involve questions following a purpose, usually to explore a particular topic or an experience in-depth, which separates an interview from an everyday conversation. Semi-structured interviews are more open than highly structured interviews, which often follow a detailed interview schedule listing all questions addressed in a predefined order, and yet more structured than unstructured interviews, which is more of an informal conversation with no or few questions prepared in advance (Easterby-Smith et al., 2015). Semi-structured and unstructured interviews tend to involve more personal responses than structured interviews. They also allow the interviewer to ask secondary questions that were not included in the prepared question list. Semi-structured interviews were chosen because they create consistency between interviews, allowing for focus and avoidance of data overload, and as they ensure that gathered data will be comparable (Morrow & Mowatt, 2015).

A topic guide was prepared including questions that would help fill our purpose (See Appendix 2). A topic guide includes an informal list of topics and questions that can be addressed in no particular order (Easterby-Smith et al., 2015). The questions were open-ended and addressed in a flexible manner working as a guide throughout the interviews. Open-ended questions can help to avoid interview bias, which is when the process of conducting an interview influences the responses (Easterby-Smith et al., 2015). Probes and follow-up questions were used in order to increase the richness and to yield in-depth responses about the interviewee’s knowledge, opinions, feelings, experiences and perceptions (Patton, 2015).

The interviews were conducted via telephone or voice call through Skype. This type of remote interviewing offers more flexibility to both the interviewee and the interviewer compared to traditional face-to-face interviewing (Easterby-Smith et al., 2015). The interviewee feels less obligated as one does not have to meet at a specific place. However, face-to-face interviews offer immediate contextualisation and non-verbal communication which a remote interview does not allow. Hence, it is important to carefully consider if it is appropriate to do remote mediated interviews for the given research. In this study, we argue that remote interviewing was the most appropriate method for collecting data. Most of the participants stated that they had busy schedules and preferred to be interviewed over the phone. And as the participants were located in different places in Sweden this was also the most appropriate method considering the resources at hand.
We started every interview by stating our motives behind the study, followed by asking for permission to record. An audio recording of the interview gave us an unbiased record of the conversation, as well as an important foundation for making trustworthy transcripts, increasing the credibility of our study (Easterby-Smith et al., 2015). The process of listening through the recordings and writing the transcripts ensured that we did not miss any essential information. All interviews, apart from two, were held in Swedish. As we, at a later stage, wrote down quotes that were to be used in our analysis, we translated these into English.

As we were two scholars conducting this study, one of us took the active role asking questions during the interviews while the other one took on a role as observer, listening and taking notes of what was being said. Eisenhardt (1989) states that this is an appropriate strategy used in case studies. This, as it increases the chance that the scholars view the evidence in different ways since the interviewer has got the perspective of a personal interaction with the interviewee while the observer retains a more distant perspective. During the interviews, the observer was able to step in and ask follow-up questions to ensure that we did not miss out on any important and relevant information.

3.4.2.3 Observations
To get a further understanding of how organisational actors use ESNs’ for IC, we decided to expand our knowledge through an observational technique. In-depth interviews provided us with information about the participant’s view of Slack usage. However, to ensure that these views were in accordance with reality, we decided to ask the organisations for permission to observe their use of different channels. As many of the participating organisation was concerned with the fact that this kind of technique would imply that secret information got out, only two of the companies were willing to share this information with us.

From one of these companies, we received “print screens” from three different channels that we could observe. The other company invited us to its Slack workplace, where we were able to follow the flow of communication for two weeks. Our role in these observations can be seen as “complete observers” as we avoided interaction with the field (Easterby-Smith et al., 2015). This method is generally of limited use to those conducting
research from a social constructionist perspective as it does not provide one with depth information. Hence, in this study, it was only used as a complement to other data collection techniques strengthening the results. If completed successfully, complete observation can provide researchers with accurate pictures of specific activities in the workplace about what is happening and how long the activities take. This kind of information was something that we were interested in, and to use an observational technique to support our in-depth interviews was, therefore, a good choice.

3.5 Data Analysis

In this study, a thematic analysis was chosen. Thematic analysis is one of the most common approaches to qualitative data analysis (Bryman & Bell, 2015), and can be defined as “a method for identifying, analysing and reporting patterns (themes) within data” (Braun and Clarke, 2006, p.79). A theme should represent some level of patterned response or meaning as well as capture something important about the data in relation to the research question.

We followed Braun and Clarke’s (2006) six phases of thematic analysis. The first phase involved to get familiarised with the data. We did this as we transcribed the data, which is needed for a thematic analysis to be made, and later re-read it several times as we noted down initial ideas. Moving on, the next phase involved generating initial codes. Coding is basically done by separating and organising the data and giving labels to parts that seem to be of theoretical significance to the study (Bryman & Bell, 2015). This was done as we coded interesting features that appeared in the data and organised the data relevant to each code. We divided the work between us as we separately transcribed and coded different interviews. At a later stage, we looked at the initial codes, reworked these and decided on our final codes together. The third phase involved searching for themes (Braun & Clarke, 2006), which was done as we, together, analysed and sorted the codes into potential themes. Next phase involved reviewing the themes. We did this to make sure that the established themes matched the coded extracts and the entire data set. Moving on, the fifth step involved defining and naming the themes and the last step involved producing the report. A visual representation of our final codes and themes can be found in Appendix 3. It is important to note that the analysis process in a thematic analysis should not be a linear process and that we moved back and forth as needed throughout the phases to ensure a just presentation and analysis of the collected data.
3.6 Discussion of Research Quality

To ensure the quality of the study, we chose to rely upon the four dimensions of trustworthiness established by Guba (1981): credibility, transferability, dependability and confirmability. Furthermore, in order to strengthen the study and ensure that it was made in an ethical manner, we discussed triangulation and considered the “10 key principles in research ethics” suggested by Bell and Bryman (2007).

3.6.1 Guba’s Criteria for Assessing the Trustworthiness

To further ensure that the steps taken in our research process has been conducted in an ethically correct way we have taken ten key principles in research ethics into consideration. We considered the “10 key principles in research ethics” produced by Bell and Bryman (2007) and further acknowledged by several researchers, among them Easterby-Smith et al. (2015).

3.6.1.1 Credibility

According to Guba (1981), credibility refers to how one can establish confidence in the truth of the findings, i.e. how researchers deal with factors affecting the situation under study that can cause problems of interpretation. One way to deal with these problems is to use triangulation as will be discussed in section 3.6.2.

It is also recommended to do member checks (Guba, 1981). This can be done by for example reaching out to the informants once again after the data has been interpreted to see whether they agree with how the researchers have made sense of their interviews. Our approach to dealing with this method was to do checks during the interviews. As soon as we felt something was unclear, we made sure to ask questions such as “What exactly do you mean by that?”. Furthermore, if we came across something unclear when transcribing and analysing the data, we reached out to the participants once again.

3.6.1.2 Transferability

Transferability refers to how the findings of a research can be applicable in other contexts (Guba, 1981). According to Eisenhardt and Graembl (2007), this is a problem when using a case study as a generalisation of data conducted in a small sample can be hard. Instead, the purpose is to make statements that are true for the given context. To deal with the problem of transferability in qualitative research, Guba (1981) recommends doing a theoretical/purposive sampling that is intended to maximise the range of information
uncovered regarding the specific case in question. This sampling design was, therefore, used in combination with other techniques. Furthermore, it is recommended to collect “thick” descriptive data that will permit comparison of the specific context under study with other contexts, and to develop a thick description of the context in order to make judgments about whether the information gathered would fit into other contexts (Guba, 1981). With this recommendation in mind, we have provided the reader with information about the companies used in this research. However, as it was requested by some organisations that we would not mention the company name or the name of the respondent in the report, we left any detailed information out. Despite this, we still argue that the information needed for the reader to get an understanding of the context is provided.

3.6.1.3 Dependability

Dependability refers to the stability of the data and raises questions about whether the results has been skewed by the methods used (Guba, 1981). This dimension deals with the importance of employing the right methods and to prove that if the work were to be repeated, similar results can be obtained. One way to ensure dependability is to use an external audit (Bryman & Bell, 2015; Guba, 1981). The researcher is then expected to provide sufficient and detailed information about the research process reaching from problem formulation to data analysis decisions. This would imply that, for example, detailed transcripts from interviews would be provided by the researchers, as well as information about how research participants were selected. To deal with this dimension, we made sure to make this detailed information about the process available in case anyone would want to take part of it. To make use of an external audit now would be very time-consuming, as is argued by Bryman and Bell (2015), and, therefore, had to be consciously overlooked due to limited resources of this study.

3.6.1.4 Confirmability

Confirmability refers to the objectivity of the study and has been covered by (1) using triangulation, as is discussed further in section 3.6.2, (2) practicing reflexivity and (3) providing rich quotes from the respondents. To practice reflexivity means for a researcher to think carefully about their roles and the way they affect the research process (Guba, 1981). According to Cope (2014), reflexivity also involves being aware of how one’s background, values, and previous experience affect the research process. To ensure accuracy and minimise the risk of bias, we evaluated our own viewpoints regarding the
subject under study before starting the research process. We acknowledged that our own views of the ESN under study were positive before we started this study. This was due to the fact that one of us had previously worked with Slack and had a positive experience of it, while the other scholar might have been affected by this. By acknowledging this risk of becoming biased, we have constantly ensured to stay neutral throughout the whole research process and not let our own viewpoints affect the study and its result. This was done by making sure that none of the questions used were guiding the interviewee towards answers that were in accordance with our beliefs. We also made sure to think carefully about our role as researchers when analysing the data collected. Furthermore, we believe that the fact that we do not personally know any of the participants contribute to the confirmability of the study, as well as the fact that we conducted the interviews over the telephone. By doing this, we removed ourselves (and for example our face expressions) from the situation and probably reduced the effect that we otherwise might have had on the participants. According to Cope (2014), another technique to deal with confirmability is by providing rich quotes. This has been addressed by transcribing and presenting quotes (see Appendix 3).

3.6.2 Triangulation

Triangulation is a process of using different kinds of methods or perspectives in order to check and establish confidence in the accuracy of the study (Easterby-Smith et al, 2015; Patton, 2015). It is used to strengthen the research and involves the use of a variety of data, researchers, theories and methodologies (Denzin, 1978). There are four basic types of triangulation. In this study, three of those four types were used. Data triangulation concerns the use of a variety of data sources in a study. It involves comparing and cross-checking the consistency of information and can, for example, include comparing observations with interviews or comparing the perspectives of people with different points of views. In this study, interviews were held with more than one person within each organisation, and we also combined interviews with observations within two of the organisations. Investigator triangulation concerns the use of multiple observers and removes potential bias that comes from a single person (Denzin, 1978). As mentioned, we are two scholars where one has taken the role as interviewer and the other has acted as an observer throughout the interviews. Methodological triangulation concerns the use of multiple methods (Denzin, 1978). Patton (2015) mentions that a study that only employs one method are at more risk for errors linked to that particular method, compared to using multiple methods. In this study,
several methods were employed, minimising these risks and achieving methodological triangulation. Furthermore, Patton (2015) mentions another way that triangulation can be achieved in a qualitative study by mixing different types of purposeful sampling strategies. As mentioned, several different sampling strategies were used in this study achieving this type of triangulation.

3.6.3 Ethical Considerations
To further ensure that the steps taken in our research process were conducted in an ethically correct way, we considered the “10 key principles in research ethics” suggested by Bell and Bryman (2007):

1. Ensuring no harm to participants
2. Respecting the dignity of participants
3. Ensuring a fully informed consent of participants
4. Protecting the privacy of participants
5. Ensuring confidentiality of research data
6. Protecting anonymity of participants
7. Avoiding deception in the research
8. Declaring conflicts of interests
9. Being honest and transparent
10. Avoiding misleading and false reporting

Principle 1-6 deal with the issue of protecting the interests of research subjects or the individuals serving as informants in the study, whereas principle 7-10 cover the integrity and transparent aspects of the study to minimise the risk of bias and ensure accuracy (Easterby-Smith et al., 2015). In this study, the principles most relevant to consider were principle 1, 3, 4, 5, 6 and 9, which we dealt with in several ways. In the beginning of each interview, we informed the participant about the motives behind our study and their voluntary role in it. We informed the participant that we would neither state his or her name nor the name of the organisation in the thesis, but that we might mention the organisation’s size, age, and industry as well as the characteristics of the participant’s role within the organisation. Furthermore, we asked for permission to record the interviews, stating that the recordings were only going to be listened to by us. All empirical data collected for the purpose of this study, including the print screens, audio recordings, interview notes, and transcripts, were securely stored only allowing access from us. Apart
from this, we made sure not to publicly share details concerning the study to persons not
directly involved in it. The interviews began after ensuring fully informed consent and permission to record. We ended each interview by stating that the participant could contact us via e-mail if needed. By taken these actions we achieved privacy, confidentiality, and anonymity of all the participants. Furthermore, to ensure an honest and transparent research we offered all participants a copy of the finalised study, which we believe would decrease the likeliness of presenting dishonest findings.
4. Empirical Findings

This chapter presents the empirical data that has been collected for this study. We begin with a demonstration of the case, presenting secondary data as well as the primary data conducted from our observations and our first-hand experience. The data that has been collected through in-depth semi-structured interviews is then presented. We end the chapter by providing the reader with several tables summarising the data.

4.1 Demonstration of Case

A demonstration of the case is needed in order to fully understand how to use Slack and its different functions and features. This demonstration is based on secondary data collected from Slack’s own webpage, our own experience as we have used Slack throughout the work with this thesis, as well as the observations done of two of the participating organisations’ Slack conversations.

Slack is a digital workspace that helps organisations get work done by offering an easy tool for communication. A team in Slack is a group of people that are using Slack to communicate and is likely to include the people that one is working with on an everyday basis.

The team is created as a team owner simply creates a team on Slack’s webpage. Moving forward, he/she invites admins who will help to organise and manage the team as they then invite the team members. If one is working in a large organisation, it is likely that one is part of different teams. One can then work in different workspaces, where each workspace functions as a separate team but are all interconnected and powered via Slack’s enterprise grid. Teams can use Slack on their computer in a browser window. It is also available as an application for iOS and Android, which means one can use it on mobile devices as well.

Below you can see a snapshot of what a typical workspace can look like, followed by a description about different functions in Slack.
The workplace in Slack includes *channels* used for group conversations. These can be organised around, for example, different departments, projects, locations, or whatever fits the organisation and team members. There are two different kinds of channels; *public channels* and *private channels*. The public channels are open to the entire team. In contrast, one needs an invitation to be part of a private channel. Slack also includes a *search* function, used as one wishes to find documents, files, posts, messages, or team members within Slack. Messages sent in public channels are searchable by everyone in the team, while messages sent in the private channels are only searchable by the people within these channels. Moreover, teams that pay for the service can invite external parties to their workspace that will only have access to one channel within that Slack team, called *single-channel guests*.

Another way of communicating via Slack is through *direct messages*. This is used as one wish to chat with only one person (DM) or when one wants to start a group message (Group DM) with maximum eight other people. The messages sent in direct messages can only be seen and searched for by the team members in that specific direct message group. If one feel the need to talk verbally, one can make *voice* and *video calls*. One-to-one calls are available for all users, whereas group calls for up to 15 participants are available for teams who pay for the service.

As seen in the picture above, one can communicate by sending emojis. These are often used as a way to react to a message. If one wishes to get the attention from someone
specific, one can type “@” followed by their username. That person will then get a notification. The notifications can be managed according to one’s own preferences as one can choose to receive notification on the desktop, mobile phone or by e-mail. Furthermore, one can customise the notifications by different channels, and set up notifications that one receives as a particular word or phrase is being communicated. One can adjust notifications to avoid receiving them at a particular time of the day, for example if one wishes to not be disturbed during evenings and weekends. Moreover, Slack offers ways in which one can organise tasks as one can, for example, put a *star* or *pin* on messages that are of importance in order to find them more easily at a later time. One can also go back and edit a message that one has already sent. Furthermore, one can change the looks of Slack and adjust the theme and colors according to own preferences.

*Slackbot* is a built-in bot that helps people to get started as they join Slack. It can answer questions and can be set up to give automatic responses to team members, such as to write the Wi-Fi password if someone asks for it. Slackbot also offers a *remind* function. For example, one can ask the slackbot to remind everyone in a specific channel that it is time to send information every week at a specific time.

Teams can customise Slack by creating *bots* or internal *integrations* that allow one to connect Slack with different tools, data sources, and workflows that will make the business run smoothly. One can plug in tools and services that the organisation is already using, and build customised bots. For example, one can integrate Slack so that one receives a quick snapshot of how the business is going with different analytics and reports, such as website visitors or total billings for the last day or week.

Moving on, we will demonstrate our findings of how the participating organisations in this study use Slack and how the participants experience this usage. The empirical findings are separated according to the different organisations and later summarised in three tables. To make this section easier and more legible, we choose to name our participants. Please note that these names are made up by us and hence not the real names of the interviewees.
4.2 Embedded Unit of Analysis 1 - Organisation 1

Organisation 1 offers services within the housing market and is celebrating 10 years on the market this summer. The company has 30 organisational actors. Participant 1, Jack, is one of the founders and a manager for one of the three different business areas within the company. Participant 2, Charlotte, is responsible for getting the products from all three business areas out in media and has been within the company for one year. She operates directly under the CEO and is not in a leading position.

The company culture is perceived as open and one that rewards employees’ independence. It is a flat organisation with one CEO, and three managers responsible for one business area each.

4.2.1 How Organisational Actors within Organisation 1 Use Slack

What different internal communication tools they are using and how they are using them

Face-to-face is the channel that is mostly used within Organisation 1, followed by Slack. They also use e-mail but it rarely happens, and they call each other sometimes via regular phone calls and on Skype. The organisation was acquired by another company last year and has, since then, access to an intranet. However, this is rarely used.

How they are using Slack

Slack was introduced in the organisation by Jack three years ago. From the beginning, they were only a few people trying it out. In time, a management decision was made to implement it into the whole organisation as they were lacking a channel that made it easy to include many people and trace back information. They use channels and direct messages, and sometimes also the call function. Slack is used as a two-way communication channel in which everyone can communicate with everyone. They use it when they want to communicate things to many people that are not worth arranging a meeting for, and if they need help and have questions that can be formulated in just a few sentences and that do not require background information. They can also use Slack for questions such as if someone wants to go shopping during lunch. Furthermore, they also use Slack for external communication with consultants, inviting them in as single-channel guests.
Slack is not used when one needs to discuss issues, when it is required that both persons understand a whole context, or if something is complex.

4.2.2 How Organisational Actors within Organisation 1 Experience the Use of Slack

**Perception about Slack**

An overall benefit concerning Slack is that it is very simple to use. And although not perceived as good as face-to-face, it is definitely seen as a good communication tool by both participants. One advantage is that one can “feel safe others will see it” (Jack). Furthermore, it is a good channel to use for things that are not critical, as one avoids interrupting people the way one might do if using face-to-face or making a phone call. Another positive thing is that each person can manage their Slack so that it fits with their work situation as it allows one to, for example, turn off notifications. It is also a good tool to use to get a good overview of what is going on within the company, especially when one is working from home.

Charlotte argues that when communicating with several colleagues, she would prefer to use Slack rather than gathering everyone and have a meeting face-to-face. She also mentions that Slack helps increase the communication, creating a good cohesiveness in the workplace. Furthermore, a big benefit with Slack is that work-related things easily can be discussed in forums that everyone has access to. This way, more people get access to information that is good to know about, and one can come with inputs into others discussions. Jack actually says he “would prefer if even more work-related issues were discussed in channels instead of in direct messages between two people”.

To use Slack as a communication tool with external consultants is experienced as a very efficient way to get answers to questions one may have. Slack is also experienced as a tool that helps them do a better job and that “encourages people to participate and to take part of and to share information, which makes it a good two-way-communication tool” (Jack). The bots are also perceived as beneficial as it allows for easy sharing of business intelligence, such as visitation-rate on the webpage.

**Slack in comparison with other communication channels**

Face-to-face is perceived as more efficient than Slack when one needs to discuss something, especially complex subjects, as it allows one to “use body language and look each
other in the eyes. It also allows you to comment faster and to contribute to the conversation more efficiently” which “makes it easier to understand the other person” (Jack). Face-to-face is also, according to Charlotte, “better to use for really big things and when something is very urgent”. However, when something is not big or urgent, Charlotte actually prefers Slack before face-to-face. Jack always prefers talking to people but states that an advantage with Slack is that text is searchable, making it easy to refer back to something. It is also perceived as beneficial that one does not interrupt people in the same way when using Slack.

Charlotte states that “Slack replaces e-mail” and argues that “it is inefficient to use e-mail because it takes a longer time until you receive an answer and it is also harder to find an e-mail”. She also acknowledges that when receiving e-mails, she herself often let it take a while before she answers because she does not perceive them as urgent. According to Jack, e-mail has very few benefits, and there is especially a problem when one is to communicate with several people. He also finds it harder to trace back to information in e-mails than in Slack. When using e-mail, one is also expected to be more formal, while “in Slack you keep it short which makes it efficient” (Jack). Furthermore, one gets more information when using Slack such as when a message has been delivered and received and whether the other person is online. The benefit that is mentioned regarding e-mail is that it is universal, making it appropriate for external communication as well as to forward external e-mails.

When considering phone calls, the benefits are perceived to be almost the same as for face-to-face communication, with the exception that one cannot see the other person. The participants would, therefore, prefer phone calls before Slack for complex information. A phone call can be more efficient than Slack as it gives a signal that something is important and that one expects the other person to answer directly, and one may, therefore, receive an answer faster. However, “one can also signal in Slack that something is important without trying to interrupt the other person, by for example sending another message asking them to answer as soon as they can” (Jack). Slack is, therefore, perceived as more flexible, especially for the person in the other end. According to Charlotte, it is easier to ‘slack’ than to call a person that you do not know very well. Also, when making a phone call one gets the feeling that one needs to small-talk, while on Slack one can just ask a question.
The effect of Slack on the organisation

Jack argues that using Slack has resulted in a more informed workforce that can, thus, make better decisions. Charlotte agrees, saying “it makes the communication more effective, and you also get a good overview of the whole business”. It is also believed to have made work more efficient, especially for an organisation like theirs in which many people are enjoying the possibility to have flexible working hours and work from home. Also, as Slack makes it easier to communicate with people that one does not know very well, Jack definitely believes that it has affected cooperation positively. According to Charlotte, Slack is good for the company culture as it allows co-workers to have funny conversations with each other.

4.3 Embedded Unit of Analysis 2 - Organisation 2

Organisation 2 started seven years ago and they are around 60 organisational actors providing tools for employment processes. Participant 1, Simon, has been in the company for about three years and is currently working as a community manager. Participant 2, Mona, is a marketing intern assisting Simon, and has been in the company for approximately seven months.

Both Simon and Mona describe the company culture as nice and open, including many different nationalities. As the company is changing from being a start-up to a bigger company, it is becoming more hierarchical than before. However, it is still perceived as a flat organisation in which everyone can bring stuff up.

4.3.1 How Organisational Actors within Organisation 2 Use Slack

What different internal communication tools they are using and how they are using them

The organisational actors are communicating with each other mainly through Slack. Phone calls are rarely used internally, but might be used in very urgent situations. Skype, on the other hand, can be used to call someone in the office when working from home. E-mail can be used when communicating bigger tasks or to-do-lists for example. Of course, they also talk to each other a lot face-to-face.
How they are using Slack

Organisation 2 started using Slack 1,5 year ago because they needed a tool in which people could chat with each other. Some resistance was evident in the beginning as people felt it was annoying to learn yet another tool, but this soon disappeared as people started using it and realised how easy it was. Channels and direct messages are Slack functions that are used within the company. Sometimes they also call each other on Slack. Furthermore, they have integrated different programs into Slack so that they receive messages automatically when certain things happen. Everyone within the organisation is available and can get reached through Slack, and it is often the fastest way to reach someone.

They are usually using Slack for simple and short questions, like “Can you do this for me?” or “Do you want to go somewhere for lunch?”. For more complicated discussions Simon argues that they usually start the conversation in Slack and decide to meet somewhere to discuss it. This is because they “have a policy “Slack before you tap”, that means that one should send a Slack message before one go and tap someone on their back to have a conversation, since it is a disturbing moment and one loses focus” (Simon). However, Mona contradicts this saying that she usually goes straight to the person instead of sending a message on Slack asking if they have time.

4.3.2 How Organisational Actors within Organisation 2 Experience the Use of Slack

Perception about Slack

Slack demands less effort compared to other communication channels; “if I want to say something to someone I want to be able to do it in the fastest and easiest way and that is most of the time done through Slack” (Simon). Mona agrees, saying that she likes Slack when communicating with co-workers as it is easy and convenient. She also likes that it is a rather informal channel where one can simply type and edit it afterward, and ask private things like “how was your weekend?” which will, in turn, improve relationships among co-workers. According to Mona, these kind of relationships are important as they affect job performance positively by making it more fun to go to work. Furthermore, Simon also mentions that one reason he likes Slack so much is because of the simple structure and nice design of Slack.

Slack in comparison with other communication channels

Face-to-face is preferred, in comparison with Slack, when having longer or more important conversations and/or when one needs an explanation of something. Mona also mentions
that face-to-face is appreciated because it provides human interaction, which is nicer than talking to a machine. Meanwhile, Slack is preferred when the questions are shorter, less important, and/or requires a simple answer. Moreover, Simon thinks that it is an easier communication channel as one does not have to go somewhere to talk, and Mona thinks it is an appropriate channel when one is concentrated and does not want to get disturbed. In situations when one is busy and has to prioritise one’s work Simon prefers to use Slack, in comparison to face-to-face and phone calls, as he can continue working while he communicates through the chat conversation.

When comparing Slack to e-mail, Slack is preferred in urgent situations as the notifications pop up getting people’s’ attention, and as it is easier to answer on a Slack message because e-mail is perceived to require more involvement. Simon says that e-mail is a more formal channel demanding more time. Slack, on the other hand, is not that formal making it a faster communication channel. Simon prefers e-mail, or a face-to-face meeting, when communicating with several people as he does not want to have too many channels on Slack as it makes it hard to find the people that he communicates with the most. Furthermore, he prefers to use e-mail when he wishes to be able to find the information afterward, as he perceives the search function for e-mail to be better than the one in Slack. Another perceived disadvantage with Slack is the risk of misinterpretation that might not occur in e-mail or face-to-face conversation. This, as one often communicates more information in an e-mail and is better able to ask follow-up questions in a face-to-face conversation, while one might interpret things differently in short Slack messages.

The effect of Slack on the organisation
Slack is believed to have contributed to easier communication. It has also improved the work environment as it has made it easier for people to get to know each other in a more “chill” atmosphere. Slack has also made it easier to plan activities with other co-workers outside of work. It also improves the personal connections, which is believed to improve collaboration and making the organisational actors enjoy work more. Furthermore, Slack is believed to have improved the productivity as one gets answers more quickly.

4.4 Embedded Unit of Analysis 3 - Organisation 3
Organisation 3 is a subsidiary company that has been in business since the 80’s and is a part of a large international organisation in the publication industry. The Swedish company,
Organisation 3, has about 90 organisational actors. Participant 1, Robert, has been in the company for about 18 years and is a middle manager in charge of the technical tools such as Slack. Participant 2, Sara, is working as an event manager and has been with the company for one year. Participant 3, Olivia, is a reporter and has been with the company for 2.5 years.

The organisation operates in an open-plan office and the culture is perceived as open. The structure is hierarchical in the way that there is a clear order on who has managerial responsibilities, but flat in the way that everyone can express their thoughts and opinions.

4.4.1 How Organisational Actors within Organisation 3 Use Slack

**What different internal communication tools they are using and how they are using them**

In Organisation 3, a decision has been made that all organisational actors should use Slack and leave other digital channels like Lotus Notes and Hangout. Furthermore, they communicate via face-to-face and e-mail. However, the use of e-mails is decreasing internally and is mostly used to external parties as well as to forward an e-mail. Once a week, a newsletter is sent out as a one-way communication tool by e-mail. Sara also mentions that they might use phone calls or Skype calls and that some people communicate through text messages via mobile phones. Moreover, one department is using WhatsApp for different projects.

**How they are using Slack**

Some people within Organisation 3 started to use Slack a couple of years ago, but it was not until November 2016 that it became an official communication tool. The functions used are direct messages, channels, voice and video calls. Voice calls are mainly used when one is working from home and calling to the office, for example to attend meetings. They have channels where information goes out to everyone in the company as well as channels for specific project groups. Slack has also been integrated with different programs or bots that, for example, sends out information about lunch menus, different news, as well as more job-related things such as if a program is not working. The organisation has got a “support channel” where one can ask questions and get answers, “it then gets easy if anyone else has got the same problem later as one can go back and check how to solve it” (Robert). They are also inviting external parties as single-channel guests.
Slack is mainly used for communicating short questions and short answers and “the communication often starts with a direct message [on Slack] and depending on the question’s character it either stays within Slack or continues via a different channel” (Olivia). It can also be used for follow-up questions, as well as small-talk between colleagues. Furthermore, “it is a good channel for asking questions to my colleagues without having to disturb them in their work” (Olivia). Sara mentions that she avoids Slack when communicating private matters. Olivia agrees and adds that she would not use Slack in conversations where one needs to deliberate a lot.

4.4.2 How Organisational Actors within Organisation 3 Experience the Use of Slack

Perception about Slack

Slack is experienced to be a good two-way communication channel and “can be a goldmine for knowledge sharing” (Sara). Robert prefers to communicate through Slack and expresses that he likes the fact that one can communicate openly in different channels where everyone can see. This, as he believes it can be very beneficial if people share things with each other instead of sending direct messages. Moreover, he argues that Slack is good as one can have different channels for different purposes and everyone can choose which channels to be part of. Olivia mentions that she likes that it is a more informal and relaxed way of communicating and that one can communicate private stuff. However, this can also be a disadvantage as one can lose focus if the conversations are of too much private character. Furthermore, she would not prefer to communicate through Slack when exchanging ideas with colleagues, as she thinks better when communicating verbally.

Olivia mentions that the tool is self-explanatory and easy to use. When implementing Slack, they held some introductory courses on how the tool functions. Sara mentions that she “would have liked to get more information on how I should use it, why, and to what end and in what situations” as she feels clear guidelines about this could avoid moments of vexation and frustration.

Slack in comparison with other communication channels

Within Organisation 3, face-to-face and Slack are said to be complementing each other. Face-to-face is experienced as a good channel when one wants to discuss things and avoid misunderstandings. “Advantages with face-to-face is that one can feel the tone of the conversation, you feel the person’s energy, you see facial expressions, face-to-face is pretty much better in every situation”
Olivia says “if I want an answer within 30 seconds, I go and talk to the person, as I do not really know when I will get an answer through digital channels”. However, all participants mention that a disadvantage with face-to-face is that one can easily get disturbed and dragged into a conversation. In situations when it is not urgent and the questions are of easier nature, all participants mention that Slack is preferable to use.

When comparing Slack with e-mail, two of the participants mention that they use e-mail when communicating longer messages, and that it is also appropriate in situations when they are to forward information that they have received through e-mail. Robert mentions a disadvantage with e-mail being that it can be unclear who is expected to answer an e-mail that is sent out to several people. This is better solved in Slack as “one can post it in a channel [in Slack] and just type “@” to tag the important persons and the rest gets the information just for knowledge” (Robert). Furthermore, Slack is a faster communication channel, in which one can easier get an overview of the conversations and one does not have to read through long e-mail conversations to find what one is looking for. However, “a disadvantage in comparison to e-mail is perhaps, since it goes that fast to communicate through Slack and it is so accessible, it can sometimes become too much” (Olivia).

In a comparison between phone calls and Slack, Robert says that in urgent situations he would write on Slack first and then call if he does not get any response. A disadvantage with phone calls is that it can be very time demanding, especially if the other person is fond of talking. Then one might forget the things one was meant to discuss as the conversation gets carried away.

**The effect of Slack on the organisation**

Robert believes that Slack has increased the communication within the organisation, especially across different departments. He believes that it has resulted in a more open culture where people collaborate and help each other more, which is extra important in their industry. Additionally, it has resulted in fewer e-mails sent internally.

### 4.5 Embedded Unit of Analysis 4 - Organisation 4

Organisation 4 is an advertising agency working in the business-to-business sector. The company, as it looks today, was created in 2012 when two organisations got together. Currently, there are about 20 organisational actors working at the firm. Participant 1,
Emma, works with production, often in different project teams. She has been with the firm for 1.5 years. Participant 2, Jennifer, works as a project manager in the production and started working for one of the original firms in 2009.

The company culture is perceived as open and they are all working in an open-plan office. The structure is rather hierarchical, with a CEO, production managers, and team members, but everyone can still talk to everyone and express thoughts.

4.5.1 How Organisational Actors within Organisation 4 Use Slack

**What different internal communication tools they are using and how they are using them**

The teams within the organisation are working with IC in different ways. Emma says; “*it is often the project manager who decides what they like to use*. The people within the company use a mix of Slack, e-mail, Hangout, and face-to-face communication. Jennifer states that she uses Slack within two of the teams that she is leading, and that the teams that are not using Slack might use Hangout instead. Phone calls are rarely used internally as they are sitting close to each other, but Emma says that one can use it in urgent matters if the person is not at the office and does not answer on e-mail, Slack or Hangout.

**How they are using Slack**

Slack is currently not an official IC channel within the organisation as it is only used in two of the organisation’s project teams. A project manager decided to use the tool within one team about 3-4 years ago, and he has now got plans on implementing it in the whole organisation. However, an attempt to do so has not been carried out yet. Jennifer was working in the team where Slack was introduced and learned to use it simply by working with it, with no further introduction. They communicate with approximately 5-6 co-workers through Slack, and they use the functions direct messages and channels.

Slack is basically used as a fast communication channel for short questions, information, and material, but also for small-talk within projects. Emma mentions that she does not use Slack when the communication is more of a private matter or if she wants to discuss something important with her boss. Jennifer says that she does not use Slack when it is a lot of information that needs to be communicated, for example when a new big project is about to start.
4.5.2 How Organisational Actors within Organisation 4 Experience the Use of Slack

**Perception about Slack**

When asked which communication channel they prefer, Jennifer says she prefers Slack for the daily fast communication because it is just that, fast. Emma also prefers Slack when communicating with co-workers. They both like it as they have all information that is related to a project gathered in one place, allowing one to easily trace back information. Furthermore, Emma says that she gets more work done as she does not have to run around asking for information, and Jennifer likes that one can create channels for different projects resulting in more effective work. It is a convenient way to send links and material that one wants to have in writing. Jennifer also mentions that she sometimes uses Slack when she is not working to keep herself informed.

Jennifer mentions that as it is so easy to write on Slack, one can easily write a lot of messages resulting in messy information with unnecessary comments. Another perceived downside is that if the information in a channel is only directed to one person, it is perceived as unnecessary to disturb everyone else.

**Slack in comparison with other communication channels**

When comparing Slack with face-to-face communication, the participants mention that the latter often gives a more immediate answer, allows for eye-contact and leads to fewer misinterpretations. Face-to-face is, therefore, perceived as better if one wants to discuss something that is a bit tricky, is bothered by something and/or wants immediate feedback (Jennifer), or if one wants to discuss something private or serious as face-to-face feels more personal and professional (Emma). On the other hand, face-to-face is more time demanding and one might disturb the other person by going up to him/her. When using Slack one can deal with things as one has got the time to, which is why they sometimes use it even if they sit next to each other. Slack is also appreciated as one does not have to leave the desk to communicate with someone.

In comparison with e-mail, both participants prefer Slack when a back-and-forth communication is needed, as they feel that Slack is a faster and more direct channel. With Slack one can have a whole conversation open in a window rather than in several e-mails, making it easier to find what one has written. Jennifer says that e-mail is good to use when there is a lot of information to be communicated, or when one wants to forward external e-
mails. However, an advantage with e-mail is that one avoids a lot of small messages as people often writes everything they want to communicate in a single e-mail.

As mentioned, another tool that is used within Organisation 4 is Hangout. Both participants say that it is rather similar to Slack. However, they prefer Slack as it is easier to organise and create groups where one can have everything related to a specific project. Furthermore, Emma prefers the appearance of Slack and states that it is easy to use.

**The effect of Slack on the organisation**

It is hard to estimate what effect Slack has had on Organisation 4 as they are currently only using the tool within two project teams. When considering these teams, Jennifer thinks that the use of Slack has resulted in better control of the information related to that specific project and a more informed team that knows where to find information and ask questions, which has also resulted in a good collaboration.

4.6 **Embedded Unit of Analysis 5 - Organisation 5**

Organisation 5 works within the entertainment industry. Both participants belong to the IT-department in which they are around 70 organisational actors, and the findings will, hence, be mostly associated with this department. However, they also communicate with the whole organisation via Slack, in which they are 500+ organisational actors. The participants are both in charge of groups of about 11 people. Participant 1, Michael, has been within the organisation for 8 years and participant 2, Philip, for 2.5 year.

There is some hierarchy, especially in the company as a whole, but the culture is still perceived as open. They have recently been introduced to an activity adapted workplace, meaning no one has its own office space. Instead one is moving around in different areas.

4.6.1 **How Organisational Actors within Organisation 5 Use Slack**

**What different internal communication tools they are using and how they are using them**

Slack is the communication tool that is most often used within the IT-department. They use e-mail and ordinary phone calls very rarely for IC. They also communicate face-to-face and try to have weekly meetings and to meet when they are to discuss big things. They sometimes use Hangout to call each other, and as they are very digital, they also use tools
to create to-do-lists and to visualise things. They also have an intranet, and they sometimes use newsletters as a one-way communication channel.

**How they are using Slack**

Slack was introduced in late 2013 as Michael and some of his colleagues tried it out, and has since then spread across the organisation. They are now, much because of the activity adapted workplace, a very digital organisation using several different digital tools, and Philip even states; “sometimes when I get home in the afternoon, I can have a strange feeling in the mouth because I have not opened it during the day. That is a very strange feeling”.

They use the functions direct messages, channels, and voice and video calls. They also have several bots that can give information about when the next subway leaves from the closest station, and how many people used their services yesterday. Slack is believed to have replaced e-mail internally and is used as a tool in which one can have fast discussions and receive fast answers, as well as have daily conversations. They usually create channels for a specific project team, which they delete when the project is completed. It is also used for news monitoring as well as to share fun stuff with your co-workers. One channel that they have is used to sharing information with everyone and consists of 500+ members. They also use Slack to communicate with external partners. Situations, when Slack is not used, can be when one is to discuss sensitive subjects. Neither is it used for sensitive information that one does not want to make traceable.

4.6.2 How Organisational Actors within Organisation 5 Experience the Use of Slack

**Perception about Slack**

Overall perceptions of Slack are that it is a good way to receive fast answers, it is easy to access and one can easily be clear about who is supposed to answer what. Furthermore, Slack is of huge advantage in an activity based workplace like theirs. It is also perceived that Slack enables teams to create a team spirit as one can have discussions of both high and low character, something that is important in order for one to enjoy work.

Philip mentions that one disadvantage with Slack is that it may make it hard to let go off work on the weekends. However, Michael disagrees, saying it allows one to check in, but only if one wants to. Furthermore, “there is no way to put a ‘sense of urgency’ on the message, and also, the information you put there will always be there” (Michael). Philip also argues “there is a risk
that you avoid face-to-face communication and discuss something on Slack instead, that would have been more efficient to discuss physically”. It can also lead to too much discussion as it is easy to use.

**Slack in comparison with other communication channels**

Compared to face-to-face, Slack is beneficial as it allows more people to participate in a discussion and as it allows one to think about a question carefully before one gives an answer. Michael argues that “face-to-face is more efficient when a group of people wants to reach conclusions”. According to Philip, one can discuss everything on Slack as long as it is not personal, and that is it beneficial as they work on six different floors.

E-mail is experienced as a good way to get out information to everyone, i.e. one-way communication. However, both participants perceive Slack as a faster communication channel, especially since you are less formal in Slack. Another reason can be that one usually answers to a Slack message when in a meeting, while one does not check the e-mail during a meeting. Using Slack, one also comes closer to the others as one can see whether they are online or not. It is also easier to express emotions in Slack by using emojis and GIFs. Furthermore, Slack is better for group conversations as it is easier to know who is supposed to answer what.

Phone calls are used very rarely internally. Michael says that “it has to be very urgent if you call someone”. It is a good way to communicate if one is to discuss solutions, as some information may get lost in writing. However, “Slack leaves the receiver with the opportunity to answer when he feels he has the time” (Michael), so one does not interrupt another person in the same way when using Slack.

The intranet is used to communicate internal news and to provide the organisational actors with different handbooks, and other general information concerning the organisation. It is, therefore, a one-way communication channel, allowing for very limited feedback.

**The effect of Slack on the organisation**

It is believed that Slack has increased the communication within Organisation 5. The work is perceived as more efficient and easy as it allows one to easily communicate with many people, and it is also believed to have affected cooperation among organisational actors positively as one comes closer to co-workers.
4.7 Embedded Unit of Analysis 6 - Organisation 6

Organisation 6 is a service-company within the fast-moving-consumer-goods industry. It was established by a couple in March 2012 and has now grown into a business with 40 organisational actors. Participant 1, Tom, is one of the founders and the CEO. Participant 2, Alice, has been within the company for two years and works with the product quality and marketing.

The company culture is perceived as sort of a family culture. There is some hierarchy, but it is more perceived as a flat organisation where everyone has different responsibilities and everyone talks to everyone. The company operates in two different locations, one where they plan the product, where Tom and Alice works, and one where they create the product.

4.7.1 How Organisational Actors within Organisation 6 Use Slack

What different internal communication tools they are using and how they are using them

Regarding IC, they are using face-to-face as the main tool. Other than that, Slack is a channel that they use a lot, while e-mail and phone calls are rarely used for IC. They also have a Facebook-group to reach out to those who are not on Slack.

How they are using Slack

Organisation 6 started using Slack in November 2015 as Tom felt there was a big gap between face-to-face and e-mail. They are 15 people on Slack, representing all full-time employees with some kind of responsibility. They use Slack mainly during office hours but sometimes also outside office hours. They use the functions direct messages and channels when one wants to ask simple questions and to send out information. It can be used when a person is only 20 meters away, and when people are in different locations.

Discussions that require a thoughtful conversation or that are sensitive in its nature are examples of when Organisation 6 do not use Slack. Moreover, “one does not use Slack when it’s very urgent” (Alice).
4.7.2 How Organisational Actors within Organisation 6 Experience the Use of Slack

**Perception about Slack**

Slack is experienced as easy to use. It is graphically clear, and it “is easy to see what you communicate and with whom you are communicating” (Tom). Slack is also a great channel in which to share information and ask questions, as other people can see it without being a part of the conversation. Tom says that “our rule for using Slack is that all information that is not private should be discussed in a public channel so that everyone can get access to it”, making it a good tool to use to get an overview of the business. Alice mentions that using Slack also makes things easier as the conversation becomes an on-going process and one does not have to wait until the next time one sees a person.

According to Tom, the communication has increased since the implementation of Slack. This can, however, be both an advantage and a disadvantage. One gets a better overview of the business and it results in fewer overlaps of activities, but one will also have more information to go through. Slack is also said to be a powerful tool as they are (1) growing and (2) are working at different physical locations. Slack also provides one with the opportunity to get rid of thoughts that one might have during weekends. One might not want to text a person, but to Slack someone is perceived as better because then the other person can see it whenever he/she chooses to open Slack.

**Slack in comparison with other communication channels**

Within Organisation 6, face-to-face is still experienced as the most important communication channel. The reasons for this are that it allows you to create a connection, to see how the other person interpret your information and as it provides you with the opportunity to use body language and to emphasise on things. Advantages with Slack, on the other hand, are for one that it can be more efficient, especially if the face-to-face communication does not have a clear purpose and plan. When using Slack, the information also becomes recorded which can be beneficial if one forgets something. Tom prefers Slack for information sharing. However, for conversations with more variables, Slack is believed to be insufficient.

Slack is believed to have replaced e-mail to some extent. This is because it is believed to be slower and less interesting than Slack, resulting in a challenge to generate a conversation. Alice also argues that e-mail is a communication tool in which one receives tons of
information and one may, therefore, miss out on something important. E-mail is, however, still used in some occasions. Alice believes e-mail is of good use when one is to send long texts. It is also “used to forward external information” and “when one wants to send something private that one wishes to be able to trace back to later on” (Tom). Other than this, both Tom and Alice are struggling to come up with advantages related to e-mail.

Phone calls are a communication tool that is rarely used, especially now after the implementation of Slack. It can be used when one wants to ask a large question to someone that is not in the same physical place. However, if one just wants to share something with someone else or just wants an answer to a short question, Slack is most often used.

The Facebook-group is used as a one-way communication tool for sharing information, especially to those who are not on Slack. Compared to Slack, “the Facebook page is used for more general communication while Slack is more for daily on-going communication” (Tom).

**The effect of Slack on the organisation**

It is believed that Organisation 6 have succeeded in keeping its family culture, although the company has grown a lot, much thanks to Slack. This, as it allows one to communicate more with colleagues and as a result, one gets closer to them. Tom and Alice also believe that the work has been affected positively. It provides organisational actors with the opportunity to communicate to everyone even outside the weekly group meetings, resulting in that organisational actors can perform their tasks in a more efficient manner “as everyone knows what everyone is doing, and what problems we have” (Tom).
4.8 Summary of Findings

In this section, the empirical findings are summarised in three different tables in order to give an overview of similarities and differences between the different organisations.

### Table 5. Usage of Slack functions

Table 5 shows a summary of the different functions used in the organisations.

<table>
<thead>
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<th>Functions</th>
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</table>

### Table 6. Experiences of the use of Slack and its characteristics

Table 6 shows a summary of positive (+) and negative (-) experiences of the use of Slack in different situations and Slack’s characteristics. If the participants’ opinions are somehow divided, this is expressed by +/- in the table. The last column in the table shows an overview of the general experience, positive or negative, about the statement.
Table 7. Slack’s effects, before and after implementation

Table 7 shows a summary of how Slack has affected the different organisations, based on the views of participants when comparing before and after implementation.

<table>
<thead>
<tr>
<th>Effects of Slack on Organisation</th>
<th>Org. 1</th>
<th>Org. 2</th>
<th>Org. 3</th>
<th>Org. 4</th>
<th>Org. 5</th>
<th>Org. 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better overview of the business</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased communication</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Improved cooperation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Improved relationships among actors</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Enhanced productivity</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
5. Analysis and Conclusion

In this chapter, we present the seven themes that have been identified using a thematic analysis. Theories and concepts introduced in the frame of reference are used to explain the findings and we conclude each theme by stating how they contribute in answering our research questions. A discussion of different viewpoints between managers and employees is also done within the themes in which such differences are identified. We end the chapter by providing concluding remarks and expanding the model that was introduced in the frame of reference.

5.1 Analysis

The main focus of this study is to explore (1) how organisational actors use ESNs as a tool for IC and (2) how organisational actors experience this usage. A case study within six different organisations allowed us to collect data about this subject. By going through this data using a thematic analysis approach, we were able to identify seven different themes that enable us to answer our questions.

5.1.1 Theme 1: Implementation

By looking at our findings, we can conclude that managers experience Slack as a tool that is easy to implement into an organisation. The employees agree, arguing that Slack is a tool that is easy to learn and something that one adapts to fast, without any education needed. This is probably because many of the participants appreciate the structure and design in Slack. These findings can be related to what Welch (2012) argues, saying that effective communication is achieved if employees feel that the information is easily reached and the channels are acceptable to them. The perception among organisational actors that Slack is easy to use may, therefore, have been crucial for the implementation to be successful.

Lunden (2015) states that companies who have tried to implement ESNs in an attempt to increase communication have failed due to resistance from employees. By looking at our findings, we would say that this is not really the case. Some resistance can be evident in a few organisations, but it is a resistance that has in most cases soon disappeared as employees have realised that Slack is easy to learn. Only in Organisation 3 can we see some resistance, as one of the participants mentions that her group of colleagues often use WhatsApp instead of Slack even though they have been told otherwise. This resistance was,
however, not due to that they felt that Slack was hard to learn. Instead, it was simply because they have been using WhatsApp for a long time and has continued to do so for convenient reasons. One must, of course, look at our findings carefully as our sample only consists of companies that are still using Slack. The perspectives of organisations that have failed in their implementation due to resistance have, therefore, not been taken into account.

Lunden (2015) also argues that if an ESN looks much the same as other social media tools that people use today, the implementation will more likely be successful. We argue that this can to some extent explain why organisational actors feel that Slack is an easy tool to learn. As mentioned in the method, we have been using Slack ourselves as one of our data collection approaches during the process of this research. We can, therefore, state that Slack works in much the same way as other social media tools, and that we, thanks to the fact that we use tools such as Facebook and Twitter, were able to understand Slack fast. This was also mentioned by some of the participants. The findings may, hence, have been severely different if our sample would have included people that are not that active on social media in their private life.

This theme can be related to RQ2, as we can conclude that organisational actors experience Slack as a tool that is easy to use. This will, in turn, probably increase network externality, making it a good communication tool that can be beneficial for the organisation (King & Lee, 2016).

5.1.2 Theme 2: Content
The second theme regards what kind of functions and features that Slack provides the users with and how these are experienced by the organisational actors. According to Leonardi et al. (2013), ESNs allow workers to (1) communicate with one co-worker of their choosing or include several co-workers in the conversation, (2) explicitly indicate which person the communication is directed to, (3) post, edit and sort files and (4) view the messages that they receive at any time of their choosing. This is, according to our findings, correct, and the first three points become apparent within this theme.

All organisations included in our sample use the textual functions direct messages and channels. A private message can be used when one wants an answer from a specific person.
However, several participants actually prefer if the majority of the communication is done in public channels including several or all co-workers. To use public channels is experienced as very beneficial as it enables a more informed workforce and, as a result, a more productive workplace. Leonardi (2014) argues that ESNs may result in vicarious learning as people are passively exposed to what others are communicating, and this may explain why people feel they become more informed and, as a result, more efficient. According to our participants, channels can be used for one-way communication by for example dedicating a channel for news monitoring, and two-way communication in which people ask questions, give feedback or discuss things not related to work. Some of the participants also mention drawbacks with using public channels. People may be scared to use channels that they know many people are part of, or one may run the risk of information overload, which will be further discussed in section 5.1.5.

Several participants mentioned the possibility to “@” the person that the message is directed to. This is in line with point number two stated by Leonardi et al. (2013), and is experienced as a really good feature when using public channels for discussions that may not be extremely important for everyone in the channel but that is still good for everyone to have knowledge about. According to our sample, this can save a lot of time as you avoid situations in which no one knows who is supposed to answer what, as can be the case when, for example, e-mailing several people. In relation to point three stated by Leonardi et al. (2013), the participants also use Slack to send attachments as Slack is experienced as a good channel to use for this practice. It is perceived as easier to do through Slack than e-mail, and face-to-face does not allow for this at all.

As stated by Williams (2015), Slack allows organisations to integrate other programs, or build customised integrations, in order to save time. To integrate other programs with Slack, so that the users receive information, is mentioned by many organisations, and this is especially perceived as beneficial by managers. Organisations use this function to share information about all kinds of things, resulting in a more informed workforce. These kind of integrations are argued to save time for the organisational actors, and we can, hence, agree with the statement by Williams.

Another feature that is widely used is that of expressing emotions by using emojis and GIFs. This is perceived as improving the quality of the messages and is particularly
mentioned in relation to feedback, as an applaud though Slack can make you feel good about yourself. Based on our findings, we argue that this is a characteristic that makes Slack a good channel. Several participants mention face-to-face as the best channel as it allows them to see reactions and face-expressions. By using emojis and GIFs, one can show this through Slack to some extent, making the communication more complete. The possibility to express emotions is especially good in comparison to e-mails and is believed to improve the culture within the organisation as it creates a relaxed environment.

Concluding this theme, we can add to RQ1 that Slack is used for both private and public communication within organisations, but that many prefer if most of the communication is done publicly. Features they use are to “@” someone, to integrate other programs and to send emojis and GIFs. Regarding RQ2, they especially perceive public communication as good as it results in vicarious learning and, hence, productivity. The @-function makes the communication more clear than for example e-mail, and to integrate other programs saves time and creates a more informed workforce. Furthermore, emojis and GIFs are experienced to make the communication more complete and creating a more relaxed work environment.

5.1.3 Theme 3: Situations

Welch and Jackson (2007) have developed an Internal Communication Matrix, in which four dimensions have been identified. When analysing our findings, we conclude that Slack is more or less being used within all dimensions. The internal line management communication may take place within Slack as, for example, different project managers communicates with the operational manager on a day-to-day basis about work tasks in a vertical two-way communication. However, the participants mention that face-to-face is the preferred communication channel for this dimension, but that many of them still use Slack as it is convenient when working in different locations or when one does not want to disturb the other person. The internal team peer communication occurs as organisational actors communicate with each other on a horizontal level in Slack channels associated with different work tasks and/or departments. Internal project peer communication is occurring in many organisations as they create channels for particular projects. Lastly, internal corporate communication is not as commonly done within Slack. Some mentions that this sort of communication might occur in Slack channels open for everyone within the organisation in which news are being communicated. Others state that this sort of
communication is mainly done via e-mail and electronic newsletters. These participants mention that e-mail is an appropriate channel to use for this type of one-way, downward, communication as it does not require any feedback, whereas in situations where feedback is needed, the participants would rather use Slack. This is in line with Welch (2012), who states that e-mail is a good channel for one-way communication, while it is not as appropriate to use for two-way communication. With our findings at hand, we can state that Slack is of better use for two-way communication. A summary of how organisations use Slack within these dimensions is presented in Table 8.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Level</th>
<th>How organisations use ESNs within the dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal line management</td>
<td>Line</td>
<td>Two-way, vertical communication taking place within channels or direct messages, e.g. as the operational manager and the production site leader discuss the daily deliveries.</td>
</tr>
<tr>
<td>communication</td>
<td>managers/supervisors</td>
<td></td>
</tr>
<tr>
<td>Internal team peer communication</td>
<td>Team</td>
<td>Two-way, horizontal communication between organisational actors in channels associated with specific work tasks or departments, e.g. as colleagues within the marketing department discuss a campaign.</td>
</tr>
<tr>
<td></td>
<td>colleagues</td>
<td></td>
</tr>
<tr>
<td>Internal project peer communication</td>
<td>Project group</td>
<td>Two-way, horizontal communication between project members in channels created for specific projects, e.g. project members discussing work tasks to meet the project deadline.</td>
</tr>
<tr>
<td></td>
<td>colleagues</td>
<td></td>
</tr>
<tr>
<td>Internal corporate communication</td>
<td>Strategic</td>
<td>One-way, vertical downward communication taking place in open channels, e.g. as management communicates important news to everyone within the organisation.</td>
</tr>
<tr>
<td></td>
<td>managers/top managers</td>
<td></td>
</tr>
</tbody>
</table>

Table 8. Internal Communication Matrix via ESNs

Face-to-face interaction is often perceived as the most optimal channel for communication, especially when it comes to communicating complex information, new strategies and goals, or bad news (Crescenzo, 2011; Smith & Sinclair, 2003). This is supported by our findings, as the participants prefer face-to-face before Slack in complex situations where an explanation or discussion is needed, or when one is to discuss sensitive or personal matters. However, it is often mentioned that Slack is used to plan these meetings. There are also situations in which Slack is preferred, such as when one has got short questions which require simple answers, or when one needs help with something concrete. This can be explained using the statement by White et al. (2010) saying that face-to-face can be time-consuming, as employees may prefer dealing with these simple matters in a digital channel rather than attempting to find the other person in order to save time.
We have found that the participants have got different perceptions about the preferred communication channel in urgent situations. Approximately half of the interviewees state that they would not use Slack in situations where they need an immediate answer. Instead, they prefer to ask these questions over the phone or face-to-face. The other half state that they, in fact, would use Slack in urgent situations as they perceive it as being the fastest communication channel. Some say that they would use Slack first, and if they do not receive an answer immediately, they would turn to another communication channel. We believe that these diverse opinions are due to the fact that organisations lack clear guidelines on how to use Slack, and that it, hence, becomes unclear for organisational actors if they are supposed to answer fast or not. This issue will be discussed further in section 5.1.4.

It is also evident that Slack is also used to communicate with external partners. Several organisations mention that they enjoy the possibility to invite external consultants into their channels so that people can ask them questions in efficient ways, saving a lot of time that otherwise would be spent on e-mailing back and forth. We believe that this can be related to the theory by Leonardi (2014) talking about vicarious learning associated with ESNs, as everyone in the channel will gain knowledge when one person asks questions to the consultants. The use of Slack with external partners has especially been noted by participating managers. We believe that this is due to the fact that managers are often in charge of the communication with external parties and, hence, value the possibility of making it more efficient.

What we can add to RQ1 from this theme is that Slack is used in more or less all the dimensions established by Welch and Jackson (2007), however, most often as a two-way communication channel. It is used for short questions and simple answers, and organisations also use it to communicate with external partners. Regarding RQ2, we can add that communication with external partners in Slack is experienced as time-efficient.

5.1.4 Theme 4: Remote Work

As discussed in the frame of reference, communication professionals need to respond to changing conditions in the industry and adapt their communication according to needs of the organisation and its employees (Schultz, 2002; Taylor, 2010). Many of the participants
mention that they have got a flexible job where they can work from home or from another location and that they really appreciate this kind of working arrangement. Slack is, according to the organisational actors, a tool that facilitates this. One could, hence, argue that an important characteristic of Slack making it such an appreciated channel is that it connects people working from different locations. These findings are in line with Shirky’s (2008), stating that ESNs connect people who are not in the same physical location.

Our findings showed that Slack is being used on the computer when working from the office and might be used on their phone when they are not there. Many of the participants stated that they can go online and check if something has happened on Slack even off working hours. The reasons for this goes in line with findings by Williams (2015), who states that mobile and desktop applications make it easy for people to keep up with what is going on. Besides the reason that one wants to be up-to-date, we also find that participants did this out of curiosity or simply out of habit, and not as they felt obligated to do so. However, we recognise a potential risk with this, as one might not be able to let go of one’s work. Some participants stated that they might post things on Slack during the evenings and weekends, but that they do not demand answers at these time. However, this might not be obvious for the persons receiving the messages. As Smidts et al. (2001) states, employees should receive valuable information about what managers expect of them in their work. From our findings, we can conclude that it, in some organisations, might exist a need for guidelines on how Slack should be used in these, and other, situations.

This theme allows us to conclude and add to RQ1 that by using both the desktop as well as mobile application, Slack is used to connect people working in different locations, sometimes even outside office hours. Regarding RQ2, we can conclude that Slack enables remote work which is perceived as very beneficial and that you can check in outside of office hours is experienced as both beneficial and a challenge.

5.1.5 Theme 5: Accessible communication channel

As stated in the frame of reference, employees who use ESNs tend to maintain connections with colleagues whom they do not know or not communicate with on a regular basis in an offline setting (Leonardi, 2014). This is something that our findings support. While they most often use Slack to communicate with their closest co-workers, Slack has also, in some organisations, increased communication across departments. This is
because the organisational actors find it easier to reach out to people whom they do not know through Slack, than for example face-to-face or over the phone. This, as it provides a more anonymous context and as it does not require any small talk.

According to King and Lee (2016), the communication channel must provide two-way interaction for it to be effective. Furthermore, it must provide information that is perceived as accurate, relevant and useful by the organisational actors. As Slack is experienced as a two-way channel in which everyone in the organisation can be reached, it is often perceived as a good tool to use when one wants to share information with the whole office. When analysing our findings, we found that this was especially noted by the participating managers, and we believe that it is due to that they value the possibility to share information to everyone and create a cohesiveness in an easy and effective way. Participants in our study also state that Slack is a good tool to use to get an insight of what is going on within the organisation, which is important for both employees and managers. Hence, by analysing our findings we can conclude that Slack can be an effective IC tool as long as the messages being communicated are perceived as relevant.

Moreover, King and Lee (2016) state that an IC channel should be easy to access and provide network externality in order to be useful for the organisation. The findings show that Slack is easy to access and as most of the participating organisations have Slack channels where one can reach everyone in the organisation, it also provides network externality. Slack is, for example, experienced to be a more accessible channel in comparison to e-mail. This, as most participants state that they do not read their e-mail as often as they check the Slack feed, and as one can see who is online on Slack, making it easier to expect when one will receive an answer. King and Lee (2016) also found advantages with social media to be that it is accessible as one can use it on the phone and that it makes it possible to communicate with people whom one cannot physically interact with. We have found this to be true for ESNs, as the participants argue that Slack is easy to access and allows one to connect with people who are not in the same location. Furthermore, as one can reach everyone in the organisation by simply writing on Slack, one does not have to interrupt someones’ work. Participants mention that these advantages with Slack save time, often resulting in an increased productivity.

As stated by Sloboda (2010), technology-based communication tools increase the risk for information overload. This is supported by our findings. A reason for this is that as Slack is
such an easy channel to access, one might write unnecessary comments. Furthermore, it is mentioned by one participant that as communication in Slack is often public, one might take part of conversations that are not relevant for oneself resulting in information overload. However, this is something that other participants, and especially managers, perceive as beneficial, as one gets information of what is going on in the organisation. This falls in line with Leonardi’s (2014) statement about vicarious learning that has been brought up in previous sections.

From this theme, we can add to RQ1 that as Slack is accessible for everyone, it is used as a way to communicate with everyone in the organisation, even people that one does not know. Regarding RQ2, we can conclude that as it makes it easier to communicate with people, communication increases leading to a more informed workforce. The accessibility increases network externality, which is in turn perceived to improve productivity. Accessibility can also lead to information overload. However, most of the participants experience this accessibility as something positive as it results in vicarious learning.

5.1.6 Theme 6: Characteristics of the communication

When discussing the use of e-mail as a communication tool, a common problem that is being raised is that one can more easily misunderstand written communication than verbal communication (Smith & Mounter, 2008). Another problem associated with e-mail is that one may not receive an answer as soon as one would like. These concerns are shared by our participants as they most often use the textual functions in Slack. The majority state that Slack is not an appropriate tool to use for complex information as it increases the risk for misunderstandings. In these situations, face-to-face communication is preferred as it allows people to sense tones and create a connection. Regarding fast answers, our findings are that organisational actors believe answers are received much faster through Slack than through e-mail, with one of the reasons being that one does not have to be as formal when writing a Slack message. That Slack is a more informal communication channel is also perceived to create a more relaxed work environment.

Written communication is also believed to come with some advantages. The fact that the conversations are saved is seen as beneficial in some situations, as one can look back if something has been forgotten. It is also believed to be beneficial when one wants to avoid interrupting someone else, and this is where the fourth point stated by Leonardi et al.
(2013), to view the messages at any time of one's choosing, comes in. According to our findings, this is experienced as a good characteristic as it makes one more confident when reaching out to someone else. This, as it makes one sure one will not interrupt the other person. We believe that this can easily be related to work productivity, which according to Leon et al. (2017) can be one of the results of ESN usage, as one dares to ask more questions while at the same time avoiding slowing down someone that is in a working flow.

From this theme, we can add to RQ1 that organisations most often use the textual functions in Slack and that the communication often is informal. Regarding RQ2, they do not perceive Slack to be a good channel for complex information as text can be easy to misunderstand. The fact that it is an informal channel is experienced as good as it becomes more efficient. The organisational actors also like the fact that textual communication is saved, and that one, by using Slack, avoids interrupting other people making one more confident when reaching out to people.

5.1.7 Theme 7: Results

As mentioned in the frame of reference, Kane et al. (2015) identify a possible problem with ESN usage to be a reduction in personal interactions resulting in psychological isolations. Zhang and Vankatesh (2013) contradict these assumptions saying ESN is a complement, rather than a replacement, for offline communication. Our findings are in line with those of Zhang and Vankatesh, as a recurrent opinion among the participants is that Slack does not replace face-to-face communication. It is only in Organisation 5 that Slack is believed to have somewhat replaced physical interaction. This organisation is the biggest one in our sample and works in an activity-based workplace, which is why this is viewed as something positive. From this, it might be drawn that Slack can sometimes replace inefficient face-to-face communication in situations when it, for example, is hard to find a colleague or gather everyone in the same place. All organisational actors in the sample, however, state that they still talk to each other a lot and that this is important. Slack is, instead, believed to replace e-mail, with the reason being that it is experienced as a more efficient channel. Hence, many of the participants are relieved by the fact that Slack has decreased the number of e-mails one gets as it was hard to manage the inbox before the implementation of Slack. Some participants also mention that Slack has reduced the number of phone calls, as many
of the questions that were asked over the phone before are now dealt with in public channels in Slack.

Moving on within the theme about Slack as a complement (Zhang & Vankatesh, 2013), Slack is believed to, instead of decreasing personal contact, increase the communication among the organisational actors. It is experienced as a channel that allows everyone to get in contact with everyone, and that makes it easier to communicate with a lot of people. This is believed to result in better cooperation and a more helpful environment.

According to Friedl and Verčič (2011), IC has two main roles. It should be used to deliver information, and it should create a sense of community within the organisation. By looking at our findings, we would like to state that Slack is a tool that fulfills these roles. The participants argue that Slack makes the environment more open and that they now receive more information. Slack is also believed to enable the creation of a team spirit. The participating organisations use Slack as a communication channel in which they communicate about both work-related issues as well as personal things, bringing co-workers closer together. It makes it easier to communicate with people that one does not know very well, and it is easy to send out a question asking if people want to meet up after work. To get closer to co-workers is perceived as a very positive thing as it makes work more fun, resulting in an increased job motivation as one looks forward to going to work in the morning. One can relate this to social capital, something that is created in a trustful and communicative climate (King & Lee, 2016) and that, by creating favourable relationships, can result in good cooperation among employees (Bisung et al., 2014; Coleman, 1988). We can also relate our findings to organisational identification. Participants state that they feel closer to colleagues by using Slack and that one can better understand the bigger picture when receiving more information, something that can strengthen organisational identification (Ruck & Welch, 2012; Smidts et al., 2001). By bringing co-workers closer together, and by helping everyone understand the bigger picture, Slack can also help enhance employee engagement (Welch & Jackson, 2007).

By analysing our findings we can conclude that the perceptions regarding this theme are mostly held by managers. This, however, does not have to imply that they are the only ones who will notice Slack’s effect on the organisation. Instead, we believe that this is due to that
most of the employees within our sample were not a part of the organisation when the implementation occurred, making it problematic for them to discuss such issues.

The last theme identified in this study helps to add to RQ1 that organisational actors do not use Slack as a replacement for face-to-face, rather it is seen as a complement. It does, however, replace e-mails and phone calls to some extent. Regarding RQ2, participants experience Slack as more efficient than e-mail, and a channel that increases communication among colleagues. The increased communication is, in turn, perceived to improve cooperation and create a more open environment in which one gets closer to co-workers. This can then result in enhanced social capital, organisational identification and employee engagement.

5.2 Concluding Remarks and Further Development of Model

The purpose of this study is to explore organisational actors’ use and experience of ESNs for internal communication. Even though we choose to solely focus on one ESN, we argue that our findings can be applied for other ESNs as they are rather similar in both their appearance and functioning.

The conclusion is divided into the two research questions of this study, and after these questions have been answered, we summarise our findings in the model that was initiated in the frame of reference (see Chapter 2).

5.2.1 How do Organisational Actors Use ESNs for Internal Communication?

In accordance with previous research, ESNs are used as a communication tool in which organisational actors can communicate with specific co-workers or communicate messages to everyone in the organisation. To communicate publicly through Slack, even though the message only is directed to one person, is a recurrent practice. ESNs are, therefore, in accordance with previous research, a tool that increases communication with colleagues and that leads to vicarious learning. ESNs are used as a two-way communication channel in different dimensions of the organisations, and functions for both vertical and horizontal communication. Most of the participants within our sample view ESNs as a channel used for short and fast questions and answers, but that still allows one to answer when one has got the time. Continuing to support already existing research, ESNs are also used to connect remote workforces.
Our findings reject the notion that ESNs will reduce direct personal interaction among organisational actors. ESNs are instead used as a complement for other internal communication practices, filling a gap between e-mail and face-to-face communication. So instead of replacing physical interaction, ESNs are used for two things; (1) replacing internal e-mail communication and (2) increasing the communication within organisations.

Our study also challenges the fact that ESNs are only used for IC, as several organisations also take advantage of the opportunity to communicate effectively with external partners.

5.2.2 What are Organisational Actors’ Experiences of Enterprise Social Networks for Internal Communication?

To begin with, organisational actors experience the implementation of ESN to be fast and easy. When implemented into the organisation, it is perceived as a tool that is easy to use and to access, resulting in network externality. This network externality may, in turn, increase productivity. ESNs also make getting in contact with people easier. It is often perceived as the preferred communication channel in situations where one has got short questions that requires simple answers, as one can be sure not to interrupt other people like one would have done if using face-to-face or a phone call. It is also good to use when discussing matters that may not be directed, but yet relevant, for everyone, as this way of communicating publicly can result in vicarious learning. Organisational actors experience that they are now more informed thanks to the ESN and that ESNs are an efficient way of creating a more cohesive workforce. It has also been found that ESNs can create a good environment among co-workers as it makes it easy to cooperate on work-related issues, and to plan non-work-related activities in which people can get to know each other. To create these kinds of relationships with colleagues is perceived to increase job motivation. All in all, it is experienced that ESNs can increase productivity and cooperation within an organisation, which we believe may result in, for example, enhanced social capital, organisational identification and employee engagement.

Our findings show that organisational actors do not experience ESNs as a good tool to use for complex information as these situations require personal interaction. Some of the participants also believe that ESN usage can sometimes lead to too much information. This is, however, argued to be beneficial by some.
5.2.3 Further Development of Model

The concluding remarks made above allow us to further extend the model that was initiated in the frame of reference (see Chapter 2). This extended model is presented in Figure 4.

![Figure 4. Organisational actors’ experience of Enterprise Social Networks](image)

As one can see in this model, organisational actors use ESNs for private, public and remote internal communication. This way of using ESNs then goes through a filter of different characteristics associated with ESNs, and the usage is then perceived to result in several outcomes. The outcomes are presented in two columns. The first column represents outcomes directly linked to the use of ESNs, while the outcomes in the second column occur as a result of the outcomes in the first column.
6. Discussion

This chapter begins with a discussion of some of the findings that have not been covered in the analysis as they do not directly relate to the research questions, but that may still be interesting for the reader to gain knowledge about. We continue by discussing what theoretical, practical as well as societal implications our findings may have. The chapter will end with a section outlining limitations of the study and suggestions for future research.

6.1 Discussion of Additional Findings

By writing the theoretical framework of this thesis, we understood that IC is very crucial for a business. This understanding was something that developed as we conducted the interviews. Many participants stated that IC is the most important thing for an organisation, as, without it, no work would get done. It also creates a good environment as it makes everyone work towards the same goals. The participants also argue for the importance of transparent information, as it makes one feel part of the “bigger picture”.

Another recurrent theme that we have identified when analysing the interviews is that the participants believe that it takes a certain organisational culture in order for an ESN to be effective. They believe the culture has to be open even before the implementation, something that is in line with Korzynski (2014). When analysing our findings, we can see that all the organisational actors perceive their organisation’s culture to be open. This may, hence, explain why all the organisations included in our sample have succeeded when implementing an ESN.

6.2 Implications

6.2.1 Theoretical Implications

As mentioned in the frame of reference, there is a lack of research on employee preferences regarding IC and different communication channels (Uusi-Rauva & Nurkka, 2010; Welch & Jackson, 2007). As stated, there is also a gap of research regarding the subject of ESNs (Leonardi, 2014). The limited research that exists state that ESNs are used for communicating both privately and publicly within organisations (Leonardi, 2014), and enables working from different locations (Shirky, 2008). This type of communication can
improve communication and collaboration, and lead to vicarious learning (Leon et al., 2017). As a result, employees’ productivity and motivation may increase.

By conducting a qualitative study about how organisational actors use ESNs and how they experience this usage, we are able to add to this research. Our findings, combined with the existing research, is presented in Figure 4 (see Chapter 5). In this model, we present some characteristics of ESNs that we have identified as important by organisational actors. These include; easy to implement, easy to use, accessible, informal and avoids disturbance. These characteristics then work as a filter promoting different outcomes. Regarding outcomes, our study enabled us to conclude that different organisational actors agree upon the fact that ESNs will increase communication and collaborations, and lead to vicarious learning. Moreover, we are able to conclude that they also experience the characteristics of ESNs to improve network externality, bring you closer to co-workers and reduce the number of e-mails and phone calls that one receives.

Our qualitative research enables us to move forward in this model, discussing additional outcomes that may result because of the outcomes in the first step. Our findings support existing research in that productivity and motivation are perceived to increase. Furthermore, we can add the outcomes informed workforce and relationship promotion to the model.

6.2.2 Practical Implications

By looking at our findings, we would like to conclude that organisations that identify a need for, and are thinking about implementing, an ESN do not have to be scared of the resistance that is mentioned in research (Leonardi, 2014). When weighting our evidence, it appears likely that this resistance will be small and only last for a short period. This, as it is experienced as such an easy tool to learn and use. In contrary to what Leonardi (2014) states, the implementation of an ESN has rather been perceived as positive and beneficial by organisational actors.

We can, through this research, provide managers with some guidelines for using an ESN. As a first, if thinking about implementing an ESN, clear policies about how to use this channel should be established. Several participants argued that this is something that is missing within their organisation and that this would improve the use of ESN. When establishing these policies, they should keep in mind that organisational actors’ experience
ESNs as a tool that is good for the daily, on-going communication such as simple questions, and fast and short answers. It can also be used for sharing information with all co-workers.

As this study has been conducted within several organisations differing a lot in size, we argue that ESNs can work in different kinds of contexts. Our findings do, however, state that ESNs may be of better use in organisations characterised by an open culture and a younger workforce. Hence, if practitioners feel this is describing their organisation, and they currently identify a gap in their IC, there is a chance they may reap the benefits presented in Figure 4, especially if they follow the advice given in this section.

6.2.3 Societal Implications
As is mentioned in the introduction, organisational actors are increasingly realising the benefits with working from different locations (Avolio et al., 2001; Bell & Kozlowski, 2002). This has been echoed by the participants in our study, and they argue that an ESN makes it possible to work in this way as one can easily connect with remote workers using this technology. As is argued by Kane et al (2014), this behavior also comes with some risks. To communicate via Internet-based tools may reduce people’s personal interaction, which may, in the long run, result in psychological isolation. However, this is not supported by our findings. Hence, we can argue that the implications on society coming from ESN usage are mainly positive as it results in a more connected workforce while not decreasing personal interaction a great deal. Our findings further state that the connectivity that ESNs allows for will result in productivity. Something that we believe will, in turn, result in positive outcomes for the society as a whole.

Slack is, furthermore, argued to bring colleagues together, making it more fun to go to work. It is also argued to make one feel good about oneself as it allows for a lot of feedback. We believe that this can be connected to mental health. If one enjoys going to work, and feels appreciated by one’s colleagues, one may run lower risk becoming depressed, also affecting the society in a positive way.
6.3 Limitations and Future Research

During the research process, we have encountered some limitations associated with our study. This section will discuss these limitations and make suggestions for future research within the topic of ESNs.

This study was done using a qualitative case study. We acknowledge some limitations associated with this type of research design as our findings cannot be generalized to the larger population (Easterby-Smith et al., 2015). If future researchers have the possibility to gain access to a broader data sample, a quantitative study about ESNs can be conducted. This would allow for more generalisation, as it would strengthen the findings (Easterby-Smith et al., 2015).

Further limitations regard the sample used in the study. All of the participants are between the ages 20 to 45. We believe that these younger generations are often active on social media in their personal lives, and as a result, they might experience the use of ESNs differently than an older generation would. Our findings might, therefore, not be as applicable to organisations where the workforce mainly consists of older organisational actors. Hence, a suggestion for future research would be to study the experiences of people over the age of 45 to see if there exist any differences from our findings. Another limitation concerns the fact that our sample only consisted of organisations that are currently using an ESN. We identify a possible risk associated with this as our findings might, therefore, only reflect the views of participants from organisations where Slack is considered to be a well-functioning channel. This, as organisations that have been dissatisfied with the use of Slack, has probably abandoned it. An interesting angle for future research would, therefore, be to investigate organisations that have stopped using Slack.

This study has been focusing on organisations that were already using an ESN when the research process started out. For future researchers, we argue that a quasi-experiment in the form a longitudinal study within a single organisation would be interesting to conduct (Easterby-Smith et al., 2015). This would be done by doing interviews before the implementation of an ESN. The ESN would then be implemented in the context, and a post-test would, later on, be done by conducting interviews once again. This way, it would be easier to see what changes have occurred as a result of the implementation. Another way of conducting a quasi-experiment would be to, for example, use two project groups within
an organisation that look about the same. A pre-test would be conducted, and an ESN would then be implemented into one of the project groups, while the other group would remain the same. After some time, a post-test would be conducted to see if the group differ in any way regarding, for example, collaboration, motivation, and productivity.

Furthermore, this study has focused on the experiences of people. For future researchers, a more organisational perspective may be interesting to take on. This could be done by looking at numbers to see what has changed as a result of the ESN implementation. However, this might only be possible if other aspects that affect the business are held constant.

### 6.4 Guiding Principles

We have designed our research process influenced by the guiding principles of Jönköping International Business School: “Entrepreneurial in Mind, International at Heart, Responsible in Action” (Jönköping University, 2017). These values have constantly guided us as we have made decisions and actions during the thesis process. As an example, we have demonstrated our curiosity, as well as our action-oriented and creative capabilities in how we have used different methods for data collection, following the value of being entrepreneurial in mind.


Appendix 1 – Method for Theoretical Framework

A literature review was performed in order to provide a context for the research and to help us refine the topic of the study that would contribute to current knowledge (Easterby-Smith et al., 2015). Eisenhardt (1989) argues that this may inhibit and limit the findings of a case study as it may result in bias. Nevertheless, we argue that an understanding of the field allowed us to perform a better research.

We started out by defining a topic that we were interested in doing research about, “enterprise social networks as an internal communication tool”. From this, we could draw keywords and search terms that were to be used in the search for already existing information about the topic. A search that were to be made in the database Web of Science. We began by using the search term “technolog*” AND “internal communication”, and refining the search by choosing only the categories Management and Business and the document type Articles. This search resulted in 30 articles, and abstract of these articles were downloaded into an excel-document. Another search was made using the search term “enterprise social network*”. This search was sorted in the same way, resulting in six articles that were downloaded.

We then began to go through the articles to see if they would provide us with relevant information, and a number of 12 articles were found to be relevant. These articles were later on used as entities for snowballing, something that within a literature can be called tracing citations. We traced citations backwards, implying that we went into articles that were used as references within our sources (Easterby-Smith et al., 2015), to see if they would provide us with more relevant information. The relevant articles were read carefully, and summaries were created allowing for identification of recurrent themes. Themes that were then used as cornerstones in the theoretical framework (see Chapter 2). A gap in the literature could later on be identified, allowing us to come up with a purpose and research questions for the study.

Peer-reviewed articles with an impact factor of 0.5 were originally used to ensure quality of the information. However, later on in the process, we had to step away from this and take use of non-academic sources as well, sources called grey literature (Easterby-Smith et al., 2015). By using grey literature, in the form of newspaper articles, we could find sufficient information about new topics that were not covered in peer reviewed articles, such as information about the different ESNs Slack, Yammer and Workplace by Facebook.
Appendix 2 – Interview Questions

Interview questions used as a topic guide in the semi-structured interviews:
- What are the internal communication channels used in the organisation today?
- What internal communication channel do you prefer when communicating with leaders?
- What internal communication channel do you prefer when communicating with co-workers?
- How do you perceive the organisation’s internal communication?
- For how long have the organisation used Slack?
- How did the implementation of Slack look like?
- How do you use Slack?
- When do you prefer to use Slack?
- When do you prefer not to use Slack?
- How do you perceive Slack in comparison to the organisation's other internal communication channels?
**Appendix 3 – Citations, Codes and Themes**

<table>
<thead>
<tr>
<th>DATA EXTRACT</th>
<th>CODES</th>
<th>THEMES</th>
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<tbody>
<tr>
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<td>&quot;It is not hard to understand, and it follow pretty much other set-ups&quot; (P3, O3)</td>
<td>Learning how to use it</td>
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<td>&quot;There are showing up more functions, which we have learnt to use as they have been launched and developed&quot; (P3, O3)</td>
<td>Learning how to use it</td>
<td>Implementation</td>
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<tr>
<td>&quot;People use common sense, you know you shouldn’t do or say anything stupid&quot; (P1, O2)</td>
<td>Guidelines</td>
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<td>&quot;our rule for using slack is that all information that is not private should be discussed in a public channel so that everyone can get access to it. This way people get information not only about what has happened, but also about how things have been handled. And this without our employees’ inboxes being filled with e-mails that do not have any direct value to the person&quot; (P1, O6)</td>
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"we have a policy "Slack before you tap", that means that one should send a Slack message before one go and tap someone on their back to have a conversation, since it is a disturbing moment and one loses focus" (P1, O2)

"we do not have a policy about how to work with Slack, only that you have to have it" (P2, O1)

"we are lacking a policy of how to use Slack and when to use it, something that I think is really important" (P2, O3)

"It is also about the design of the program, I think that it is important. It is very easy structure. You have everyone gathered" (P1, O4)

"I use it more since I don’t think that it’s ugly and difficult. And the functions are working. It does what I expect it to do and it looks good. And one can adjust the colors of it a bit. That’s a plus, but it’s not a game changer but it has an easy structure. If it had been more complicated it would be as popular for me and probably not for others either" (P1, O2)

"It is easy and it looks nice, I like the design" (P1, O2)

"We use the call function." (P1, O5)

"Always, before I call someone in Slack I ask if it is okay if I call through Slack. I prefer to call via Slack if I’m in front of the computer, not during evenings of course, but if I work it is easier to call that way" (P1, O5)

"The call function has got video as well. We’re using that on a daily basis." (P1, O5)

"We do Slack calls sometimes, that we call through Slack if a person for example is at home" (P1, O2)

"And we use the call function and call in during the morning via Slack [when we work from home]" (P3, O3)

"sometimes we make video calls using Slack, because it is easier to discuss something when you can see the other person as you can see how people react to what you are saying" (P2, O5)

"We are also using the private chats" (P1, O4)

"If someone needs something directly from me, they can just send a direct message" (P2, O2)

"I use the "remind me" function sometimes, to remember things" (P1, O5)

"One also tags the person that one wish to reach" (P1, O4)

"If one wants to reach several persons, one uses the channels and tags the persons one wants to ask" (P1, O4)

"One can post it in a channel [in Slack] and just type '@' to tag the important persons and the rest gets the information just for knowledge" (P1, O3)

"One can tag persons so that one gets "now he has notified me", one sees it pretty clear once one is inside the app that one has received a notification, it gets clearer on who is going to answer what" (P1, O5)

"If one sends e-mail to three persons, no one really knows who is going to answer that certain e-mail. One can distinguish on the information and the pursuance on information a bit better [on Slack]. Some information is interesting for several to take part of but one might not expect them to answer. In e-mail that can be solved by sending CC, but it feels faster and more direct. It gets more clear and easier to know who's in the communication, who's in the conversation, one can invite people and remove and so on" (P1, O5)

"I have a setting, that if I miss a Slack message as I’m not online or something, I’ll get an e-mail about it" (P1, O2)

"a good thing is that you can decide which hours during the day that you want to be reachable" (P1, O3)

"I like it very much that you can put different notification-levels on different messages as you can @ the one that the question is directed to, and then the other people in the channel now that this is only for their information, they do not have to answer" (P1, O3)

"the snooze function is really great, that it will appear a question if you are trying to send a question late in the evening asking you if you want to send it now of if it should appear as a notification tomorrow morning" (P1, O6)

"Slack is very good in the sense that one can express more feelings, with more emojis and GIFs and stuff like that. One can express more than with just words" (P1, O5)

"The thing about emojis and showing expressions, I think that it has added value, that one receives feedback a lot faster on things and that one can easily show when something good happens, like "this is good, thumbs up."" (P1, O5)

"It is harder to express that [feelings] in e-mail [compared to in Slack]. One doesn’t use emojis like that in e-mail" (P1, O5)

"It exists a funnier way of expressing feelings and to receive feedback in Slack. If one has done something good one can get an applause or such things, which is harder to express in e-mail" (P1, O5)

"I feel that G-mail is more official and you have to read over it twice before you send it out. And in Slack you can just let it go, since you have the editing function" (P2, O2)

"We’re sending files, documents and stuff like that, and links." (P3, O3)
<table>
<thead>
<tr>
<th>Features</th>
<th>Content</th>
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<td>&quot;I can sometimes upload pictures and movies that way. For some reason, I think that it works easier than via e-mail&quot; (P3, O3)</td>
<td>Content</td>
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<tr>
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<td>&quot;Then one can use different channels. We have, for example, a group for the unit managers and our boss where we can discuss concerns that appear in the different units, which concerns everyone.&quot; (P1, O5)</td>
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<tr>
<td>&quot;One can say that we have like a &quot;work room&quot; with different channels in. That the customer is a &quot;work room&quot; and then there are channels for different tasks&quot; (P1, O4)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;We have different channels, &quot;general&quot; and we have one &quot;fun videos&quot; chat and then there are channels for different project&quot; (P1, O2)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;One can create own channels, so we have one channel for &quot;general information&quot; that covers everything from &quot;now we are having a big meeting&quot; to &quot;now there's cake in the kitchen&quot; (P3, O3)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;We have internally at our department a channel where we discuss different things that are relevant for us, for example &quot;when does the morning meeting begin?&quot; and other job related things&quot; (P3, O3)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;we have channels in which we send out general information to everyone, such as there is 'fika' left in the kitchen, and then we have channels for specific projects including only those people who are part of those projects, and we also have channels concerning different systems in which people can ask questions about that specific system&quot; (P1, O3)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;We also have channels for news watch, where we have integrations that sends news and such. So it is like a combination of automatic messages and people asking questions&quot; (P1, O3)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;it can be both very relaxed conversations, and very serious business related discussions, it depends on the channels&quot; (P1, O3)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;we have channels that everyone are a part of, and everyone can write to everyone, but I usually use it to communicate with my closest colleagues&quot; (P1, O1)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;we usually create a channel in Slack for a specific subject or project, invites the people that it concerns, and when it is finished we delete the channel. It is a good way to keep track of all the different projects that are going on simultaneously&quot; (P2, O5)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;we have a specific channel for news monitoring in which anyone can post and interesting article, and another that is called playhouse in which one can post funny stuff that has gone viral&quot; (P2, O5)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;We have integrated it with a couple of programs. For example, as soon as a * is launched, we receive a message about it automatically&quot; (P1, O2)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;The biggest channel consists of more than 500 persons right now. It can be used if we are going to have a big event (...) or something that is interesting for everyone. It can also be if we have won a prize for something and we communicate it there and receives some thumbs up from co-workers&quot; (P1, O5)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;we also have a channel called 'heroes' in which you can acclaim someone&quot; (P1, O3)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;we have a channel for feedback in which everyone can write feedback that they have received, good or bad&quot; (P1, O6)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;We have private channels, and we invite external partners, and then we have some integrations.&quot; (P1, O5)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;we have a bot that tells us when the next subway is leaving from the closest station for example&quot; (P2, O5)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;One can ask questions in a support channel, it then gets easy if anyone else has got the same problem later that one can go back and check how to solve it&quot; (P1, O3)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;I would prefer if even more work related issues were discussed in channels instead of in direct messages between two people&quot; (P2, O5)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;it is important that people dear to ask questions in the public channels, and that they are not shy, because I think that one can benefit a lot when people share with each other instead of sending direct messages to someone&quot; (P1, O3)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;We have a Bot that one can ask questions to, such as where there are available meeting rooms. So we have integrations with other tools, so that we get information sent to Slack&quot; (P1, O5)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;We have integrated Slack into our newsletter system so that if a system is down, a message will be sent into a channel automatically letting people know about this&quot; (P1, O3)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;we have a bot that each day tells us what different lunches are served at the restaurants nearby&quot; (P1, O3)</td>
<td>Content</td>
</tr>
<tr>
<td>&quot;we have a bot that tells us when the next subway is leaving from the closest station for example&quot; (P2, O5)</td>
<td>Content</td>
</tr>
</tbody>
</table>
"We also use Slack as a report-system for business intelligence, so we get information about for example revenue through Slack."

"We have private channels, and we invite external partners, and then we have some integrations." (P1, O5)

"We also have channels for news watch, where we have integrations that sends news and such. So it is like a combination of automatic messages and people asking questions." (P1, O3)

"I know that Slack works with Google Drive, for example, and that's good as we use it a lot." (P3, O3)

"It is easy to integrate Slack with other programs." (P1, O5)

"So we are using a mix between Slack, E-mail, Hangout which one can say is Gmail's chat program. And we are talking to each other also, face-to-face." (P1, O4)

"It is often the project manager who decides what [communication channel] they like to use and then that is used within the project team, so it is very different." (P1, O4)

"The disadvantage at our company is that we are all using very different communication channels." (P1, O4)

"It can be that some people are mostly using that channel and that other are using that channel most, so then one must know how to reach the person and that is not optimal." (P1, O4)

"Everyone does not use the same [communication channels], it depends on which customer or what team one is in." (P2, O4)

"Within *, we're mainly using Slack today. Besides that, we're of course using e-mail, and we meet each other, which also is a good communication channel." (P1, O5)

"We're mainly using Slack, it happens very rarely that we call each other." (P1, O5)

"It's 50/50 on e-mail and Slack [when communicating] with my closes boss. If I'm going further up the hierarchy, I only use e-mail. And phone calls if it is urgent." (P1, O5)

"We use Slack, and we use G-mail. If we mail each other it's to send each other tasks. But we mainly use Slack I would say." (P2, O2)

"We are primarily communicating via Slack and verbally I would say." (P3, O3)

"There are different departments in our company that are doing different things, but we're talking pretty much to each other even across the departments." (P3, O3)

"of course we are talking to each other, but Slack is the channel we use the most except for face-to-face." (P2, O1)

"I would use Slack if it is for example more personal communication, more daily communication. A way to communicate even if we don't see each other, how one is feeling, if one is sick, and things like that." (P1, O5)

"If I need to get an approval for something I might get it through Slack, "Is it okay if I do this?", instead of e-mailing, then Slack is functioning well. Or if I need help with something concrete "I need you to do this, can you help me with that?", that sort of Slack usage

"I'm using it [Slack] very often if I'm doing something and something is missing" (P1, O4)

"Small-talk within the different projects. To have everything gathered in one place." (P1, O4)

"It consists of a mix of spontaneous things and questions one is going to investigate in a fast way." (P1, O5)

"When we're communicating with each other about work, it can be about proof reading or questions to each other "have we received that?" "are you done?" "when can we get that?", and we also send a lot of links" (P2, O4)

"If it is fast recurring projects in which everyone know more or less what they are going to do, then one sends the information through Slack." (P2, O4)

"If one is in a meeting and needs input, the first alternative is to go through Slack and get the answer quickly." (P1, O2)

"For less important stuff, if one has a question about work or needs to get hold of something, we uses Slack." (P1, O2)

"The communication often starts with a direct message [on Slack] and depending on the question's character it either stays within Slack or continues via a different channel." (P3, O3)

"I use Slack for everything possible. Especially to get answers, to discuss what other people think is a good idea, or if I'm going to do a follow-up on something (...) but also the small-talk, socially." (P3, O3)

"I use slack when we are not in the same place at the same time." (P2, O6)

"I can discuss a lot of things with my boss on Slack." (P1, O3)
Slack is a great tool for short questions. You do not send an e-mail asking how it goes with the yearly report, you ask questions like that on Slack (P2, O3).

I use Slack in all kinds of situations (P2, O3).

We are really using slack for everything (P1, O1).

Slack is really the first choice for everyone (P1, O1).

If I face a problem that I need help with, or if I need to discuss ideas with someone, I write to them on Slack. But it can also be meaningless things like if they will go shopping during the lunchbreak. It is high and it is low communication (P1, O1).

Slack is more about right now than about long-term goals (P1, O1).

I don’t chat that often with my boss actually. It gets more that we talk face-to-face... But I would not turn to him when it is about the projects, then I turn to the project managers.

For something really quick, I would just Slack them [the leaders]. Otherwise it is easier to go and talk to them face-to-face (P2, O6).

I prefer face-to-face when communicating with my boss, or Slack or a phone call if we are not in the same place (P2, O1).

I can discuss a lot of things with my boss on Slack (P1, O3).

Sometimes, my boss can have a lot of things to do at the same time, and if it is not something urgent Slack works pretty well in that way, that one can have the conversation for a longer time (P3, O3).

If one needs to meet face-to-face, one usually Slack first "where are you" and then if one meet up and take it face-to-face (P1, O2).

It depends on how complicated it is. If it is a simple last question, like "do you have lunch with you?, then one uses only Slack. But for more complexed questions, we talk first in Slack and decide to meet somewhere to discuss (P1, O2).

If one needs to give an explanation, or I know that there will be follow-up question, or I know that there will be a debate afterwards, then I might as well take it in person. Asking "do you have time to talk" in Slack and then meet up and talk (P1, O2).

If the question is more of private nature, I usually send a question through Slack and says "Hey, do you have five minutes?" so that one can walk away and talk (P3, O3).

Even job related questions can go that way "I have an idea that I want to discuss with you" so that one can walk away and talk (P3, O3).

I usually send a message on Slack, and if I do not receive a fast answer I go and look for the person (P1, O1).

We’re sitting in an open-plan office, so if I see that the person is on his/her place I’ll walk over. If the person is in the other end of the office I write "are you at your desk?" [on Slack] and then I walk over (P3, O3).

I don’t use Slack when its urgent, then I rather go and ask or call if the person is not in the same place as I am (P2, O6).

I would never call my colleagues, only if I needed something super urgent (...) I know that she would pick up but in Slack I know that she might ignore me (P2, O2).

You get an immediate response if you call someone. You know, if you test someone it can take a while before you get a test back (P2, O2).

If one must reach someone who is not there and does not answer on e-mail, Hangout or Slack and one needs to have an answer immediately one might use phone calls. But that is rarely the case (P1, O4).

It needs to be rather important if one calls. Since one often interrupt the other persons work in that situation (P1, O5).

If I want answer within 30 seconds, I go and talk to the person, as I do not really know when I will get an answer through digital channels (P3, O3).

"Face-to-face is better to use for really big things and when something is very urgent" (P1, O1).

But of course if it is something urgent, than one usually goes to the colleague or to my boss and says "I need answers on this now" (P1, O2).

If I have something that’s very urgent, then I use Slack first. Because I get the person’s attention as it pops up [on their screen] (P1).

When I need a quick answer on an urgent question and I only need to communicate with one person, then I prefer to use Slack because it is easier (P1, O2).

I use Slack when I have an urgent question, because everyone understands that it’s urgent when writing there (P2, O3).

Phone calls can be better as, if you reach the person, you can get an answer immediately. But I usually slack first to see if I get a reaction, and if I don’t I would make a phone call (P1, O3).
<table>
<thead>
<tr>
<th>Statements</th>
<th>Situations</th>
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<tbody>
<tr>
<td>“[if we are not in the same place and] if it is really urgent, I would make a phone call. But I actually think I would try to Slack them first anyway to see if they answer fast” (P2, O6)</td>
<td>Urgent situation</td>
</tr>
<tr>
<td>“Slack makes the communication more effective, and you also get a good overview over the whole business” (P1, O1)</td>
<td>Effective communication</td>
</tr>
<tr>
<td>“it easy to see what you communicate and with whom you are communicating” (P1, O6)</td>
<td>Easy communication</td>
</tr>
<tr>
<td>“It is the easiest way to reach someone.” (P1, O2)</td>
<td>Easy communication</td>
</tr>
<tr>
<td>“It is easy. It’s just that you have your app on your desktop and it just pops up there. And you’re working on your computer anyway. It’s very convenient I would say” (P2, O2)</td>
<td>Easy communication</td>
</tr>
<tr>
<td>“I prefer to use it for simpler questions and broader information” (P2, O1)</td>
<td>Easy communication</td>
</tr>
<tr>
<td>“It saves time, I can easily communicate with a colleague and it demands the least of me [compared to other communication channels]” (P1, O2)</td>
<td>Easy communication</td>
</tr>
<tr>
<td>“in Slack you keep it short which makes it efficient” (P2, O1)</td>
<td>Easy communication</td>
</tr>
<tr>
<td>“I like to feel that I know a lot, but I hate sitting in inefficient meetings, and Slack is really good for that because then you can get a short summary of the meeting after it is done” (P1, O1)</td>
<td>Easy communication</td>
</tr>
<tr>
<td>“If I am busy with something else but needs to ask someone a question, Slack is an easy and fast way to do that” (P1, O6)</td>
<td>Fast &amp; easy communication</td>
</tr>
<tr>
<td>“If I want to say something to someone I want to be able to do it in the fastest and easiest way and that is most of the time done through Slack” (P1, O2)</td>
<td>Fast &amp; easy communication</td>
</tr>
<tr>
<td>“As fast as it gets more complicated with more people I turn to e-mail. But I’m trying to stick to Slack when it is little and I need my answer fast” (P1, O2)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“I think it is very easy to send a quick question using Slack” (P1, O1)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“Slack allows you to ask short questions and get fast answers” (P2, O3)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“It is a fast communication channel, one does not have to stand up and walk away, instead one can just send a quick message and get quickly recevie an answer in return” (P2, O4)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“If it is the daily fast information with a co-worker who is going to do different things, then I think that Slack is the best communication channel since it is fast” (P2, O4)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“Usually, we does not have that much time to do things so it is important that everyone answers straight away and that one knows that everyone knows what they are expected to do and that it gets finished in time which can be acheived via Slack” (P2, O4)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“Also, one sees the message pretty fast. And one gets a quick decision that ”Yes, I have five minutes but give me half an hour so that I can finish some things first”, for example” (P3, O3)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“It gets very clear, one could say that it gets faster” (P1, O5)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“I prefer Slack when it is something that can be used really quickly, and when it is not like an urgent thing” (P2, O6)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“I can reach a marketing manager who is stuck in meetings between 8-17 five days a week whenever I have to, and get a fast and short answer” (P2, O5)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“it feels like that in 9 cases out of 10, Slack is the fastest way to get an answer” (P2, O5)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“Slack is great for fast discussions and fast answers” (P2, O5)</td>
<td>Fast communication</td>
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<tr>
<td>“it is not expressed that it should go faster over Slack [than e-mail] but that is most often the case” (P2, O3)</td>
<td>Fast communication</td>
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<tr>
<td>“Slack is a faster tool than e-mail” (P2, O5)</td>
<td>Fast communication</td>
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<tr>
<td>“I have a bigger trust in Slack, and the response is faster in Slack than in e-mail” (P1, O6)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“The co-workers are more accessible in Slack [than in e-mail]. And it is the readiness that one is seeking when using Slack.” (P1, O5)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“I think that Slack is a faster channel [compared to e-mail]” (P2, O4)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“One knows that if one receives a message there [on Slack], that it is something that one should do fast. One can’t wait three hours to read it as some might to with e-mail” (P2, O4)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>“It is an easier solution, as it is usually pretty short and quick questions that one wants to have answers to immediately. Whereas e-mail, one never knows how long time it can take, it can end up with one being busy for several hours” (P1, O2)</td>
<td>Fast communication</td>
</tr>
<tr>
<td>Situation</td>
<td>Fast communication</td>
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<td>--------------------------------------------------------------------------</td>
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</tbody>
</table>
| "If one receives an e-mail one thinks "I'm currently doing something else and have my "e-mail time" later". Whereas, the "Slack
time" is ongoing all the time" (P1, O2)                                   |                    |                                                                            |
| "It feels like a procedure to check the e-mail, meanwhile it goes fast with Slack. One sends a short little message and then it's
done. And it one needs more one uses Slack and invites people to a meeting" (P1, O2) | Less complicated   | Situations                                                                 |
| "I prefer to use an easier chat program, at least if I'm going to communicate internally with a person, because e-mailing back
dorths feels complicated. It is easier to use Slack or Hangout." (P1, O4) | Less complicated   | Situations                                                                 |
| "Slack is more accessible. E-mail is also accessible, that one can answer whenever, but I feel that it is not as easy to answer on e-
mails" (P1, O5)                                                             | Less complicated   | Situations                                                                 |
| "When I notice that I get a message on Slack, it is easier to answer on compared to e-mail which feels more complicated as I have to
open everything. It feels like I have to pause what I'm doing, whereas I can answer a bit faster on Slack." (P1, O2) | Less complicated   | Situations                                                                 |
| "It is more accessible [Slack compared to e-mail]" (P1, O5)                 | Less complicated   | Situations                                                                 |
| "If one wants to inform a lot of people at the same time, I think e-mail is a very good way to do it. Sending out information, not if it is
something that needs to be acted on directly." (P1, O5)                    | Much information    | Situations                                                                 |
| "I prefer to use Slack. If it is a bigger task or a to-do-list then I would prefer G-mail" (P2, O2) | Much information    | Situations                                                                 |
| "[I wouldn't use Slack] if it is much that needs to be written, a lot of information, then I would prefer e-mail instead." (P2, O4) | Much information    | Situations                                                                 |
| "But if I'm going to send documents, or a report for example to someone, or if I'm going to send longer things, I'm still doing that
through e-mail because I'm not used to doing that via Slack" (P3, O3)        | Much information    | Situations                                                                 |
| "Sometimes I use e-mail when there is a lot of information, or when I am going to forward an e-mail that I have received from a
customer earlier. Then I can forward it immediately via e-mail and not have to rewrite or copy it" (P2, O4) |               |                                                                            |
| "e-mail is only used as a way to forward external information, but if I want to reach my colleague and tell them or ask them
something, I use Slack" (P1, O6)                                             | Forward information | Situations                                                                 |
| "e-mail can be better for sending some types of documents, and forwarding external e-mails, but most things are actually better with Slack" (P1, O3) | Forward information | Situations                                                                 |
| "if I receive the information in my e-mail inbox and I am going to forward the information to someone else at work, then it stays in
that channel because it is the easiest way" (P3, O3)                         | Forward information | Situations                                                                 |
| "I would rather go and talk to someone if I have to have an answer now. And if it is more of "I need to discuss this thing with you, I
don't really understand this", that type of questions" (P3, O3)               | Discussion needed   | Situations                                                                 |
| "I don't believe Slack is sufficient for discussions involving several variables, you need face-to-face for that" (P1, O6) | Discussion needed   | Situations                                                                 |
| "I do not prefer to use Slack when a discussion is needed, because then it is more efficient to talk to a person face-to-face" (P2, O1) | Discussion needed   | Situations                                                                 |
| "if there is something one wants to figure out, it is better to take it face-to-face. It allows you to include the whole picture" (P3, O3) | Discussion needed   | Situations                                                                 |
| "If one is discussing something it can take pretty much time and take up much space in Slack. That can better be solved in face-to-
faced or through a Slack call" (P1, O5)                                     | Discussion needed   | Situations                                                                 |
| "One wants to have the exchange of ideas, and I don’t think that that works as good in Slack [as it does face-to-face]. I work like that,
when I want to discuss things I want to talk to people because I think better then" (P3, O3) | Discussion needed   | Situations                                                                 |
| "It gets a bit more frustrating because one can not explain it and one might not know that the person will have questions, then it's easier
to explain it to the person [face-to-face]" (P1, O2)                        | Explanations needed | Situations                                                                 |
| "I prefer face-to-face [instead of Slack] when it is something I have to explain, when it has to do with longer things, not like “can you
send me the link?” (P2, O2)                                                | Explanations needed | Situations                                                                 |
| "It depends on how complex the questions is that one is asking. I prefer to take it face-to-face if it's complex, but if it is a short yes or
no question than I might as well take it via Slack. They have their advantages in different situations I would say." (P1, O2) | Explanations needed | Situations                                                                 |
| "I think it is complicated to explain longer things in Slack, so for that I rather use face-to-face or a phone call" (P1, O1) | Explanation needed  | Situations                                                                 |
| "When one feels that it would be faster to talk than to type [one would take it face-to-face instead]. And one doesn’t have to wait for the
person to answer on what one has written" (P1, O5)                          | Time-demanding      | Situations                                                                 |
| "Slack is good in many ways, but it can also result in that one does not have the discussion face-to-face but rather in Slack, which is
good in many situations but can sometimes take longer time to reach a decision" (P1, O6) | Time-demanding      | Situations                                                                 |
<table>
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<th>Time demanding</th>
<th>Situations</th>
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<tbody>
<tr>
<td><strong>Slack might steal time</strong> (P1, O5)</td>
<td>It can take longer time to write and reach a decision, and everyone might not be interested in taking part of all that information even if it is good to have it saved somewhere. It might be better in some situations to physically meet and talk about it and then inform the others” (P1, O5)</td>
</tr>
<tr>
<td><strong>Time demanding Situations</strong></td>
<td>“I would not use Slack when it is about private stuff, that don’t have to do with work” (P1, O4)</td>
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<tr>
<td><strong>Private conversations Situations</strong></td>
<td>“I prefer not to use Slack when it is job questions where one needs to deliberate, to discuss, and when questions that have a more private character” (P3, O3)</td>
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<tr>
<td><strong>Private conversations Situations</strong></td>
<td>“If I needed to have a private talk or something, then I would prefer Facebook or Whatsapp or something, because it doesn’t have anything to do with work” (P2, O2)</td>
</tr>
<tr>
<td><strong>Private conversations Situations</strong></td>
<td>“It can be too much [with these chat programs]. But in this regard it is important to have discipline to not get caught in those [semi-private] conversations when one has to work” (P3, O3)</td>
</tr>
<tr>
<td><strong>Private conversations Situations</strong></td>
<td>“It might be bad to have &quot;daily conversations&quot; via Slack sometimes, as one loses focus” (P3, O3)</td>
</tr>
<tr>
<td><strong>Private conversations Situations</strong></td>
<td>“The advantage is the social part of it, that it is nice, that it is fun” (P3, O3)</td>
</tr>
<tr>
<td><strong>Private conversations Situations</strong></td>
<td>“We’re also communicating about things that happen around the world, that we send links, like &quot;semi private&quot; conversations in some way. It gets a bit social but it also relates to what we’re doing” (P3, O3)</td>
</tr>
<tr>
<td><strong>Private conversations Situations</strong></td>
<td>“I have friends at the office, and when we talk about stuff that don’t have to do with work, I rather do that face-to-face than via Slack” (P1, O4)</td>
</tr>
<tr>
<td><strong>Private conversations Situations</strong></td>
<td>“If I would experience something that wasn’t working in my work situation, I would not want to talk about it via Slack. That’s something one wants to discuss in private” (P3, O3)</td>
</tr>
<tr>
<td><strong>Private conversations Situations</strong></td>
<td>“In work related situations, I don’t see any situation when I wouldn’t use it. Well, if I want to communicate with my boss about something important, I would not write it. Then I would want to talk in private face-to-face, then it’s more important conversation which one doesn’t take over Slack” (P1, O4)</td>
</tr>
<tr>
<td><strong>Sensitive conversations Situations</strong></td>
<td>“It feels more professional to take it face-to-face, otherwise it feels like one is hiding behind the screen” (P1, O4)</td>
</tr>
<tr>
<td><strong>Sensitive conversations Situations</strong></td>
<td>“If it is something that one does not feel good about, than it feels better to take it directly with that person. But I can imagine that many people think that it is quite convenient and many choose to do it [communicate through Slack] anyway, because one thinks that it is hard to talk to someone, and that it can be easier to write it” (P1, O4)</td>
</tr>
<tr>
<td><strong>Sensitive conversations Situations</strong></td>
<td>“If it is personal, you should take it face-to-face, but anything else you can basically talk on Slack” (P2, O5)</td>
</tr>
<tr>
<td><strong>Sensitive conversations Situations</strong></td>
<td>“If it is something more private, we have personal meetings each week where I usually bring it up if I have something I want to say to my boss.” (P1, O2)</td>
</tr>
<tr>
<td><strong>Sensitive conversations Situations</strong></td>
<td>“I would not use any kind of digital channel if the information is of the kind that a person can react to it emotionally” (P2, O5)</td>
</tr>
<tr>
<td><strong>Sensitive conversations Situations</strong></td>
<td>“We have private channels, and we invite external partners, and then we have some integrations.” (P1, O5)</td>
</tr>
<tr>
<td><strong>Sensitive conversations Situations</strong></td>
<td>“we also have guest-account to which we have invited external partners” (P1, O3)</td>
</tr>
<tr>
<td><strong>External partners Situations</strong></td>
<td>“We’re also communicating about things that happen around the world, that we send links, like “semi private” conversations in some way. It gets a bit social but it also relates to what we’re doing” (P3, O3)</td>
</tr>
<tr>
<td><strong>External partners Situations</strong></td>
<td>“I also use it to invite external consultants” (P1, O6)</td>
</tr>
<tr>
<td><strong>External partners Situations</strong></td>
<td>“We are inviting external parties, when we work with partners, so we have separate channels that we invite people from outside the organization, in private channels. So that we can communicate with those that we are working with” (P1, O5)</td>
</tr>
<tr>
<td><strong>External partners Situations</strong></td>
<td>“I have Slack on my phone and of course, if someone writes to me when I left work I would go online and check it but I’m not using it when I’m at home other than then” (P1, O4)</td>
</tr>
<tr>
<td><strong>Up-to-date Remote work</strong></td>
<td>“I’m free from work on Wednesdays and then everyone else is working. Then I usually check if something shows up [on Slack]” (P2, O5)</td>
</tr>
<tr>
<td><strong>Up-to-date Remote work</strong></td>
<td>“I would say that 90% of the time when I use Slack is on office hours, and the other 10% might be if I’m home sick or away and I know that something happens that day, then I’ll go online to see what’s happening” (P1, O2)</td>
</tr>
<tr>
<td><strong>Up-to-date Remote work</strong></td>
<td>“I have like a routine, that I go on to Facebook, Instagram, Slack. When a red dot appears, I go in on the app and look what has happened” (P3, O3)</td>
</tr>
<tr>
<td><strong>Up-to-date Remote work</strong></td>
<td>“I use it off work hours as well, on the subway to extend the day a bit. And sometimes during the weekends, one can go online and see if everything is okay” (P1, O5)</td>
</tr>
<tr>
<td>Statement</td>
<td>Location</td>
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<tr>
<td>--------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>I'm online all day and all night, and check in all the time”</td>
<td>Up-to-date</td>
</tr>
<tr>
<td>I check in on Slack even on my spare time, but I don't expect people to</td>
<td>Up-to-date</td>
</tr>
<tr>
<td>answer if I write something during the evening”</td>
<td></td>
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<tr>
<td>If I know that it isn't anything particular I can ignore it. But I can</td>
<td>Up-to-date</td>
</tr>
<tr>
<td>decide by myself. I feel that it is good that I can be up-to-date if I</td>
<td></td>
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<tr>
<td>want to.”</td>
<td></td>
</tr>
<tr>
<td>It can be pretty good if something would happen, an incident during the</td>
<td>Up-to-date</td>
</tr>
<tr>
<td>weekend, if there would be any problems. That one can rather easy read</td>
<td></td>
</tr>
<tr>
<td>what has happened”</td>
<td></td>
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<tr>
<td>There are some risks as well, but they exist with e-mail also, as one has</td>
<td>Mobile/Desktop</td>
</tr>
<tr>
<td>notifications and such. That it tings in the phone. But one goes on the</td>
<td></td>
</tr>
<tr>
<td>app to check when one is ready for it. It is optional, when I have time.”</td>
<td></td>
</tr>
<tr>
<td>“Sometimes I work from home and then I would need to have it to pop up</td>
<td>Mobile/Desktop</td>
</tr>
<tr>
<td>on my phone to go and fix things”</td>
<td></td>
</tr>
<tr>
<td>“I use it mainly on the computer when I'm at work, and then on my phone”</td>
<td>Mobile/Desktop</td>
</tr>
<tr>
<td>“When I'm at work I use in on the computer, and when I'm not at the</td>
<td>Mobile/Desktop</td>
</tr>
<tr>
<td>office I have in on my mobile”</td>
<td></td>
</tr>
<tr>
<td>“I have it on the computer when I'm at work, and when I use it on the</td>
<td>Mobile/Desktop</td>
</tr>
<tr>
<td>mobile phone, it is usually back and forth to work if I'm going to</td>
<td></td>
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<tr>
<td>arrive late or if I'm working outside of work, then I communicate with</td>
<td>Mobile/Desktop</td>
</tr>
<tr>
<td>my boss or my colleagues”</td>
<td></td>
</tr>
<tr>
<td>‘I’m using it both on desktop and mobile”</td>
<td>Mobile/Desktop</td>
</tr>
<tr>
<td>“I use it on the computer 99% of the time, but I have it on my mobile</td>
<td>Mobile/Desktop</td>
</tr>
<tr>
<td>phone as well (...) It is good to have it on the mobile if one is working</td>
<td>Mobile/Desktop</td>
</tr>
<tr>
<td>outside of the office”</td>
<td></td>
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<tr>
<td>I know that many, as do I, go on Slack after working hours for example,</td>
<td>Work from home</td>
</tr>
<tr>
<td>but that one cannot demand people to answer that late (...) it still is a</td>
<td></td>
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<tr>
<td>work tool that is used during office hours”</td>
<td></td>
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<tr>
<td>“I use it mainly during office hours, but sometimes when I receive</td>
<td>Work from home</td>
</tr>
<tr>
<td>messages in the evening I reply out of habit”</td>
<td></td>
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<tr>
<td>“you can share information [during the weekend] and be sure that it has</td>
<td>Work from home</td>
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<tr>
<td>ended up in the right place, and then let go of it, and still know that</td>
<td></td>
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<tr>
<td>no one else has been disturbed during the weekend”</td>
<td></td>
</tr>
<tr>
<td>“I'm only using it for the company, I'm not using it for private</td>
<td>Work from home</td>
</tr>
<tr>
<td>reasons”</td>
<td></td>
</tr>
<tr>
<td>“I can check something very quick with my boss I use Slack, but if it is</td>
<td>Work from home</td>
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<tr>
<td>something longer that I want to discuss I usually call my boss [if</td>
<td></td>
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<tr>
<td>working from home]”</td>
<td></td>
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<tr>
<td>“If it is something that someone needs answer on I would answer, but I</td>
<td>Work from home</td>
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<tr>
<td>feel that it can wait til the day after that I would wait. It depends on</td>
<td></td>
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<tr>
<td>the question, and if I'm able to answer it from home”</td>
<td></td>
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<tr>
<td>“I use it both during office hours and during my spare time, and I guess</td>
<td>Work from home</td>
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<tr>
<td>that is a disadvantage with Slack, that even though you can use the</td>
<td></td>
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<tr>
<td>snooze-function, you can never really let go of work”</td>
<td></td>
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<tr>
<td>‘I use it outside office hours as well, and mainly I like it. I think</td>
<td>Work from home</td>
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<tr>
<td>that it’s fun and that it stimulates me”</td>
<td></td>
</tr>
<tr>
<td>“I have a part time job so I feel obligated to open it and do the task</td>
<td>Work from home</td>
</tr>
<tr>
<td>[when receiving Slack messages at home]”</td>
<td></td>
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<tr>
<td>“a lot of departments have the opportunity to work from home, and Slack</td>
<td>Work from home</td>
</tr>
<tr>
<td>is a great tool for that. It keeps the conversations going”</td>
<td></td>
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<tr>
<td>“We have the opportunity to work from home (...) and that it becomes a</td>
<td>Work from home</td>
</tr>
<tr>
<td>very important tool.”</td>
<td></td>
</tr>
<tr>
<td>“a lot of people here appreciate the possibility to work from home and to</td>
<td>Work from home</td>
</tr>
<tr>
<td>work flexible hours, and Slack makes that possible”</td>
<td></td>
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<tr>
<td>“I think that if one is working in a bigger office, that it is then a</td>
<td>Work from home</td>
</tr>
<tr>
<td>huge advantage to be able to contact someone who is not sitting near you.</td>
<td></td>
</tr>
<tr>
<td>We're sitting pretty close to each other, so we can contact each other</td>
<td>Different locations</td>
</tr>
<tr>
<td>even if we wouldn't have any digital channels”</td>
<td></td>
</tr>
<tr>
<td>“Slack is a very powerful tool for us since we are growing and working</td>
<td>Different locations</td>
</tr>
<tr>
<td>from two different locations”</td>
<td></td>
</tr>
<tr>
<td>“Slack really makes it possible to work in an open-plan office and to</td>
<td>Different locations</td>
</tr>
<tr>
<td>work in remote teams”</td>
<td></td>
</tr>
<tr>
<td>“we do not sit together as much anymore, so there's no good way to locate</td>
<td>Different locations</td>
</tr>
<tr>
<td>someone, and Slack makes it possible to work in this way. We do not</td>
<td></td>
</tr>
<tr>
<td>have to sit together because the communication has moved to digital</td>
<td></td>
</tr>
<tr>
<td>channels”</td>
<td></td>
</tr>
<tr>
<td>“Slack is an efficient way to communicate, especially since we work on 6</td>
<td>Different locations</td>
</tr>
<tr>
<td>different floors”</td>
<td></td>
</tr>
<tr>
<td>“I would say that it’s easier to write to someone on Slack [compared to</td>
<td>Different locations</td>
</tr>
<tr>
<td>face-to-face] if the person is not sitting right by my side”</td>
<td></td>
</tr>
<tr>
<td>“I prefer to chat, but face-to-face also of course, but we can use Slack</td>
<td>Different locations</td>
</tr>
<tr>
<td>even if we sit next to each other as it is easier”</td>
<td></td>
</tr>
<tr>
<td>Statement</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>&quot;a while back everyone within the company were asked to start using Slack, so Slack is now the channel that we use the most&quot; (P1, O3)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;We are using Slack when we are working with one customer. Then it is only the ones working with that customer or has worked with that customer that has got access to Slack&quot; (P1, O4)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;When I work with two of our customers, we are working with Slack as internal communication, not towards the customers but you, everything from &quot;do you wanna go somewhere for lunch? To “can you do this for me?”” (P2, O2)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;Everyone is there [on Slack]” (P1, O2)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;You kind of open it in the morning and then constantly during the day, whenever people want something from you they just Slack you, everything from “do you wanna go somewhere for lunch? To “can you do this for me?”” (P2, O2)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;Everyone [in the company] is available there” (P2, O2)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;If one sends a message to all in the company, or to individuals, or so certain groups, one should expect to get an answer back” (P3, O6)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;you know everyone [in the organization] is on Slack” (P1, O1)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;all the departments in the organization has very recently started using Slack, so now we can communicate with the marketing department or someone high up in the hierarchy as well” (P2, O5)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;I communicate to a 100% with my team on Slack” (P2, O5)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;everything that is going on within the company becomes very available, and for a boss or owner, it gives you a very good insight to what is going on each day” (P1, O6)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;Slack is a great tool for us as it allows us to reach out to all employees and as it allow them to reach out to each other” (P1, O6)</td>
<td>Reaching co-workers</td>
</tr>
<tr>
<td>&quot;It is fast messages, one is using it now and then all the time” (P2, O4)</td>
<td>Online</td>
</tr>
<tr>
<td>&quot;It is expected of you to be online during working hours” (P1, O1)</td>
<td>Online</td>
</tr>
<tr>
<td>&quot;I'm not always active, but it is always on” (P2, O6)</td>
<td>Online</td>
</tr>
<tr>
<td>&quot;I check everything rather fast, I'm online all the time so I see it I receive anything, so 9 out of 10 times I answer right away” (P3, O3)</td>
<td>Online</td>
</tr>
<tr>
<td>&quot;If I'm not working on something very important. In that case, I can even close it sometimes, and if I know I'll be busy for a longer person, I put many of the common channels on &quot;mute&quot; so I don't get any notifications or messages” (P3, O3)</td>
<td>Online</td>
</tr>
<tr>
<td>&quot;The feeling with Slack is that one is much closer to each other, one can see if someone is online or one can see if someone answers someone else so one knows if they are available. Which one can not do in e-mail. One does not know when one is going to receive an answer via E-mail or if the person even checks his/her e-mail” (P1, O5)</td>
<td>Online</td>
</tr>
<tr>
<td>&quot;In Slack you can see if someone is online, and that the message is delivered, so you can feel sure that the person will get it. You cannot do that when using e-mail” (P2, O1)</td>
<td>Online</td>
</tr>
<tr>
<td>&quot;people do not check their e-mail very often, so we have to Slack each other to say that the person needs to check his or her e-mail” (P1, O5)</td>
<td>Online</td>
</tr>
<tr>
<td>&quot;E-mail is a good way of informing a lot of people since everyone eventually reads their e-mail, which one does not know with Slack, that everyone reads a Slack message” (P1, O5)</td>
<td>Online</td>
</tr>
<tr>
<td>&quot;it is inefficient to use e-mail because it takes a longer time until you receive an answer and it is also harder to find an e-mail [compared to Slack]”, (P1, O1)</td>
<td>Easy to find information</td>
</tr>
<tr>
<td>&quot;I think that it is an advantage that it is very lucid. It won't be the endless e-mail conversations in which one has to go way back to find information. It is easier to find [in Slack]” (P3, O3)</td>
<td>Easy to find information</td>
</tr>
<tr>
<td>&quot;I think that it is easier to keep check of the conversations on Slack.” (P3, O3)</td>
<td>Easy to find information</td>
</tr>
<tr>
<td>&quot;I prefer to search in my e-mail history. I don't like the serach function [in Slack] that much” (P1, O2)</td>
<td>Easy to find information</td>
</tr>
<tr>
<td>&quot;There are good search functions in e-mail nowadays as well so that you can find what you are looking for in some way, but it is ofter more time demanding to find it, and that is what I think is a con with e-mail [in comparison to Slack's search function]” (P1, O2)</td>
<td>Easy to find information</td>
</tr>
<tr>
<td>&quot;In a chat communication, you have the whole communication with one person in one window, whereas you often have got several different e-mails with that person in a conversation and that gets complicated to find things that one has written” (P1, O4)</td>
<td>Easy to find information</td>
</tr>
<tr>
<td>&quot;Calling through Slack is more accessible than group conversations over the phone.” (P1, O5)</td>
<td>More accessible</td>
</tr>
</tbody>
</table>
"sometimes it can be hard to pick up the phone and call someone that you don’t really know, but to send someone a message on Slack is not as hard" (P1, O1) | More accessible | Accessible

"If you call someone that you are not close to, you get the feeling that you have to ask the other person who he or she is doing, you don’t have to do that on Slack" (P1, O1) | More accessible | Accessible

"If I have to stand up and walk away to talk to someone I interrupt my own work. Then I can just send the question through Slack instead" (P3, O3) | No need to move | Accessible

"One does not have to run around, and gets more work done" (P1, O4) | No need to move | Accessible

"However, one might not be as social when one does all the communication through Slack. But it is nice to not have to get out of the chair sometimes" (P1, O4) | No need to move | Accessible

"It can be that one does not want to stand up all the time, then Slack is a great channel to use [compared to face-to-face]" (P2, O4) | No need to move | Accessible

"It is easier because you don’t have to stand up and walk over to [compared to face-to-face]" (P1, O2) | No need to move | Accessible

"[A disadvantage can be that] one might be in a channel but the information is not directed to me, that it writes in a channel but it actually is intended to someone else" (P2, O4) | Too much information | Accessible

"I can get annoyed when we have group chats and everyone writes a lot about a question, that it results in unnecessary information" (P2, O4) | Too much information | Accessible

"There’s also the thing with too much information. It tends to be that when one is communicating through these kind of channels, which is probably common for every kind of chat programs" (P3, O3) | Too much information | Accessible

"Among the last ten notifications that I have receive, maybe half of them have been necessary" (P3, O3) | Too much information | Accessible

"If one cannot make an agreement, and one wants to find a solution, the discussion between these two-three persons that are going to find the solution might not be of interest for others to follow [which is the case if they're discussing in a common channel]" (P1, O4) | Too much information | Accessible

"It can also be information overflow" (P1, O3) | Too much information | Accessible

"It can be easy on Slack that one just throws away some messages and writes a lot of messages at the same time and that it results in messy information, it might be unnecessary small comments that one has to sort out." (P2, O4) | Too much information | Accessible

"A disadvantage in comparison to e-mail is perhaps, since it goes that fast to communicate through Slack and it is so accessible, it can sometime become too much (...) It’s sort of the tone in it. It is much easier to just write “woho” to something good. Which one wouldn’t do in an e-mail" (P3, O3) | Too much information | Accessible

"[Advantages with Slack] are that one has got everything gathered there that concerns the customer, and one can share it in different channels that concerns different projects, and different persons, one can either have direct contact with one person so that one has a common to-do-list throughout the day that way." (P2, O4) | Everything gathered | Accessible

"One can say that it gets effective, and that one has the right information gathered in the same place" (P2, O4) | Everything gathered | Accessible

"It is good to have all information that concerns a customer at one place" (P2, O4) | Everything gathered | Accessible

"Slack is better for group conversations as one can make it clear who is supposed to answer and that the others are only there to get the knowledge [compared to e-mail]" (P1, O3) | Communication with many | Accessible

"One can also have different groups, which also is an advantage, to be able to communicate with several people at one time" (P2, O4) | Communication with many | Accessible

"the good thing with Slack is that on the one hand you can get information out to all people, and that on the other hand you can have channels for specific areas or projects in which everyone who is part of or interested in can join" (P1, O3) | Communication with many | Accessible

"I am crazy about Slack. It is a good way to communicate and knowing that everyone will see it" (P1, O3) | Communication with many | Accessible

"Slack is very good tool to use for two-way communication in comparison to other digital tools, it encourages many people to participate" (P2, O1) | Communication with many | Accessible

"Slack works very well for broad communication, in situations when you what to reach out to many people" (P2, O1) | Communication with many | Accessible

"I feel safe others will see it [the message sent in Slack]" (P2, O1) | Communication with many | Accessible

"it is also a effective way to share information to the whole office" (P1, O6) | Communication with many | Accessible

"since Slack is a closed system you can control who is in there, you know that they are online, and you know that everyone gets a notification when you are writing in ‘general’, and this closed systems provides a safety" (P2, O1) | Communication with many | Accessible
<table>
<thead>
<tr>
<th>Written communication</th>
<th>Communication with many</th>
<th>Knowledge sharing</th>
<th>Communication with many</th>
<th>Written communication</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>“If I have an assignment, I would rather have it in written than if they [project managers] say it to me. Because I can go back and see...” (P1, O4)</td>
<td>Communication with many</td>
<td>Knowledge sharing</td>
<td>Knowledge sharing</td>
<td>Written communication</td>
<td>Characteristics</td>
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<td>“It depends on how many I communicate with, if it is just one person I can take it face-to-face or via Slack, but if I’m going to communicate to more than one person I would e-mail instead.” (P1, O2)</td>
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<td>Knowledge sharing</td>
<td>Written communication</td>
<td>Characteristics</td>
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<td>“I would use G-mail for more official things like “this is the report and this is this…” and Slack is more “can you do this for me” or something like that, more informal.” (P1, O5)</td>
<td>Written communication</td>
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<td>Characteristics</td>
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<td>“If it had been more serious or if one wants it to be more formal, one might turn to the e-mail inbox instead. It might be the thing with these type of communication channels, that it is a different tone in it.” (P3, O3)</td>
<td>Written communication</td>
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<td>“It is a bit informal as well, e-mail is more that you have to kind of look what you’re writing but on Slack you can just start to type and then edit it afterwards” (P2, O2)</td>
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"I think that writing down information also has its benefits, because then the information exists and one doesn't forget about it, then one can have it as a checklist through the day and deal with it as one has got time, one doesn’t have to interrupt what one is doing at that time” (P2, O4)

Written communication
Characteristics

"I think that the communication can be clearer when one writes to each other" (P1, O4)

Written communication
Characteristics

"It is a smooth way of sending direct-links and material that one wants to have in written form in order to know what to do, like a to-do list” (P2, O4)

Written communication
Characteristics

"The advantages [with Slack] are that one has it in written form and know what one is going to do and is able to go back and check” (P2, O1)

Written communication
Characteristics

"when you are discussing complex things, writing is not enough" (P2, O5)

Written communication
Characteristics

"a problem with Slack is that things that you have once written will be there forever, so I would not discuss sensitive information that I do not want there to be a paper trade on, then I prefer face-to-face” (P2, O5)

Written communication
Characteristics

"It is a good communication channel for asking questions to my colleagues without having to disturb them in their work” (P3, O3)

No disturbance
Characteristics

"If I’m sick, I might as well tell it through Slack. Then I don’t have to call my boss at 7 in the morning and wake him up, instead he sees it when he wakes up and are on his way to work” (P3, O3)

No disturbance
Characteristics

"like if you are not sure if they are busy, you can just send them a message. It makes you more confident” (P2, O6)

No disturbance
Characteristics

"I definitely prefer talking to people, as long as I am not interrupting someone … I have some in my team who I know does not like to be interrupted, and then Slack is a great tool” (P2, O1)

No disturbance
Characteristics

"Slack is great because you know the other person will see it, but you leave it up to him to decide when to answer, if he needs time to think about the question or whatever” (P2, O1)

No disturbance
Characteristics

"we are working in a open-plan office, so we still talk to each other a lot, but the good thing with Slack is that you avoid interrupting the other person” (P1, O3)

No disturbance
Characteristics

"When you’re very concentrated, then you obviously don’t want anyone tapping on your shoulder like “excuse me”, then on Slack you can just ignore that” (P2, O2)

No disturbance
Characteristics

"When it something that I want to ask, but I don’t want to interrupt what I’m doing at that moment, I would rather use Slack than go and talk to someone” (P3, O3)

No disturbance
Characteristics

"Sometimes we’re sitting next to each other so then one can just “shout” to each other. But that might not always be appreciated either by the person one is “shouting” to since it disturbs and one has to answer and interrupt what one is doing” (P2, O3)

No disturbance
Characteristics

"I do that quite a lot [communicate face-to-face]. It might piss them off a bit, because I just go straight to their desk without asking if they have time” (P2, O2)

No disturbance
Characteristics

"When one is working as we do, one needs to be focused and then one does not want to get disturbed [than Slack is preferred]” (P3, O5)

No disturbance
Characteristics

"At times, maybe I could have written it on Slack but it is nice to just go and say “hey” to people” (P3, O3)

No disturbance
Characteristics

"Advantages with face-to-face is that one can feel the tone of the conversation, you feel the person’s energy, you see facial expressions, face-to-face is pretty much better in every situation” (P2, O6)

Human interaction
Characteristics

"I prefer to have everything digitally, but facial expressions can also be good sometimes” (P1, O1)

Human interaction
Characteristics

"I always prefer talking ot people (…) it provides you with the ability to create a connection with the people you are communicating with, and you can also keep on elaborating on what you are talking about” (P2, O6)

Human interaction
Characteristics

"Advantages with face-to-face is that one can feel the tone of the conversation, you feel the person’s energy, you see facial expressions, face-to-face is pretty much better in every situation” (P2, O3)

Human interaction
Characteristics

"[I prefer face-to-face] because of the human interaction, which is nicer in a way than talking to a machine.” (P2, O2)

Human interaction
Characteristics

"Although maybe I could have written it on Slack but it is nice to just go and say “hey” to people” (P3, O3)

Human interaction
Characteristics
"face-to-face and phone calls can be better in misunderstandings" (P1, O3)  |  Misunderstandings  |  Characteristics
---|---|---
"Then questions can arise and everyone can say what they are thinking about. If one only communicates digitally with each other, it is easier that one misses things, or think that the others have understood but they haven’t" (P2, O4)  |  Misunderstandings  |  Characteristics
"I prefer face-to-face because there are no misinterpretations because one can ask immediately if one does not understand" (P2, O4)  |  Misunderstandings  |  Characteristics
"If one discuss a complicated thing over Slack, it is possible that one misses a lot of stuff, stuff that one wasn’t thinking about and misinterpreting each other (...) It doesn’t happen as often via face-to-face because then one can ask questions there and then." (P1, O4)  |  Misunderstandings  |  Characteristics
"Slack do not replace anything else, it is a complement to other channels. And it takes away unnecessary e-mails" (P1, O3)  |  Replacing other channels  |  Results
"I don’t know how much time I spend on Slack each day, but I know that I’m using e-mail much less now" (P1, O3)  |  Replacing other channels  |  Results
"Slack has replaced conversation-mails, and ‘what are we supposed to do in this situation’-mails" (P1, O3)  |  Replacing other channels  |  Results
"Slack replaces e-mail" (P1, O1)  |  Replacing other channels  |  Results
"the amounts of e-mails we send internally has decreased since we started using Slack” (P2, O1)  |  Replacing other channels  |  Results
"since we started using Slack, the amount of e-mails we receive has decreased a lot. And Slack has also replaced the ‘sit together and talk gossip’ somewhat” (P2, O5)  |  Replacing other channels  |  Results
"Slack do not replace face-to-face communication, I still talk to the employees every day about how work is going and if they have a struggle with something and needs help with anything. Then later on, when we work through these struggles, Slack is a good tool to use. But we still value face-to-face communication highly, through daily catchups and weekly meetings.” (P1, O6)  |  Replacing other channels  |  Results
*I think that they are complementing each other [Slack and face-to-face]. That's the thing with Slack, it is a good complement and make work easier in that way. But it is not a replacement for anything “ (P3, O3)  |  Replacing other channels  |  Results
"many of the question that one asked over the telephone before are now asked over Slack instead” (P1, O6)  |  Replacing other channels  |  Results
"slack is replacing phone calls more and more” (P1, O6)  |  Replacing other channels  |  Results
*I don’t think that it has affected the face-to-face communication. I think that before [Slack], one used e-mail instead” (P1, O5)  |  Replacing other channels  |  Results
"the discussion among employees have moved to digital channels” (P2, O5)  |  Replacing other channels  |  Results
"The company culture has definitely changed [once Slack was implemented]. One has contact with much more people and it is definitely easier to communicate with many” (P1, O5)  |  Communicating more  |  Results
"We are communicating more now, definitely” (P1, O5)  |  Communicating more  |  Results
"the communication has increased, and there is more limitless communication [since implementation]” (P1, O3)  |  Communicating more  |  Results
"people help each other more now than before [implementation]” (P1, O3)  |  Communicating more  |  Results
"we get a better team-spirit thanks to Slack, and we communicate more” (P1, O1)  |  Communicating more  |  Results
"Slack has opened up for more communication, and I can talk to everyone. Before, it was only one to one.” (P2, O6)  |  Communicating more  |  Results
*I believe that cooperation has increased because you dare to ask more people for help now that you have a way of asking without interrupting the other person” (P2, O1)  |  Communicating more  |  Results
"the communication has definitely increased since we implemented slack, because things that would not have been worth sending an e-mail about is worth sending a Slack about” (P1, O6)  |  Communicating more  |  Results
*I know that we, several times, have been reminded that it is time to communicate our values again thanks to Slack. Like for example if one has written ‘a client could not make it before 6 am today so I told him that we are closed’ and then I have been able to tell that person that that is not the way it works around here” (P1, O6)  |  Positively affected work  |  Results
<table>
<thead>
<tr>
<th>Quote</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;I believe that the productivity has increased, absolutely. Because one receives answers faster and one spends less time waiting on an answer or in a meeting&quot; (P1, O2)</td>
<td>Positively affected work</td>
</tr>
<tr>
<td>&quot;the work has been affected as it has become easier and more efficient&quot; (P1, O6)</td>
<td>Positively affected work</td>
</tr>
<tr>
<td>&quot;I think that the work has become more effective. One gets answer on less complex questions a lot faster.&quot; (P1, O5)</td>
<td>Positively affected work</td>
</tr>
<tr>
<td>&quot;I would say that the culture has become more open and better because there is more information available to everyone&quot; (P2, O1)</td>
<td>Openness</td>
</tr>
<tr>
<td>&quot;I think it [Slack] creates a feeling of being involved in what everybody is doing, and it contributes to an environment in which everybody helps each other because you see the company as one entity&quot; (P1, O6)</td>
<td>Openness</td>
</tr>
<tr>
<td>&quot;during the time that we have used Slack we have gone from 10 to 40 employees, and we have succeeded in retaining quality and customer satisfaction much thanks to the openness that Slack provides&quot; (P1, O6)</td>
<td>Openness</td>
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<tr>
<td>&quot;you can create a team-spirit in Slack, in a channel. So it is not only work related discussions in Slack, it is both high and low. And that team-spirit is important in order for you to feel good about your job&quot; (P2, O5)</td>
<td>Closer to co-workers</td>
</tr>
<tr>
<td>&quot;It contributes to that we are communicating easier with each other. Earlier, if we would do something outside of work we took it face-to-face or sent out a calendar invitation, but now it is super easy to just use Slack, so I believe that more things happen outside of work as a result of it&quot; (P1, O6)</td>
<td>Closer to co-workers</td>
</tr>
<tr>
<td>&quot;It gets easier to get to know each other in some way. Instead of it being formal meetings or e-mails one can take it in a more &quot;chill&quot; way and get to know each other in a different way&quot; (P1, O2)</td>
<td>Closer to co-workers</td>
</tr>
<tr>
<td>&quot;In the end, you spend most of your days with you colleagues anyways so why wouldn’t you want to develop a relationship with them and even be friends rather than co-workers?&quot; (P2, O2)</td>
<td>Closer to co-workers</td>
</tr>
<tr>
<td>&quot;That definitely affects work, but in a positive way. Because you know when you comes to work in the morning you have friends there. It’s not &quot;oh, I have ot go to work now&quot;. I think it is quite important actually.&quot; (P2, O2)</td>
<td>Closer to co-workers</td>
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<td>&quot;I think it [Slack] is good for the culture, we have fun group chats&quot; (P1, O5)</td>
<td>Closer to co-workers</td>
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<td>&quot;This tool makes it easier to gather people and plan activities&quot; (P1, O2)</td>
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<td>&quot;If one has got a relation to them [colleagues] outside of the office, then one has got a more personal connection and I think that one can work even better together.&quot; (P1, O2)</td>
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<tr>
<td>&quot;It makes it even funnier because one has a forum where one can talk about other stuff and not just focus on job 8 to 10 hours per day&quot; (P1, O2)</td>
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