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# **Intranets for communication and collaboration**

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Master thesis, 15 credits, INFM02, in Informatics

Presented: June, 2010

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## *Abstract*

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Presented: June, 2009

Thesis type: Master thesis

Language: English

Keywords: Intranet, communication, collaboration, computer mediated communication, CMC

### **Abstract**

In this qualitative study, we set out to describe how intranets are used for communication and collaboration. A literary review concerning intranets, communication, computer mediated communication, intranets and communication, collaboration and finally, intranets and collaboration were conducted. After reviewing the theory, 3 persons working at a consulting firm in the construction industry in the south of Sweden was interviewed in order for us to gain data for the study. We conclude that there are several benefits when communicating via the intranet; information is available, no distortion occurs, it allows for storing of communication, it facilitates working from home and communication is more efficient in some areas. Yet, the preferred medium for communication is the telephone or face to face meetings if possible. We also found that the intranet is used to share the projects being worked upon, but beyond that, the intranet plays a small role for collaboration within the company.

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# 1 Background

Communication and collaboration are crucial for an organization. Organizations are created and sustained by individuals who communicate *and* collaborate with the intention of fulfilling common goals (Barnard 1938/1968, in Heide et al., 2008). An organizations success is therefore dependent on the methods of communicating and collaborating. But what is communication and what is collaboration?

Communication is the flow of information (Fiske, 1997). Information is created by a sender and communicated through a medium to a receiver. It is important that the information is interpreted correctly to be of any value. In order for an organization to be successful, it needs to make the right decisions, and making the right decisions is in part dependent on the communication process of the organization (Hall, 1999). Furthermore, for the individual employees of an organization to successfully accomplish their tasks, relevant and easily accessible information is needed (Choo, 1998).

Kanter (1994) and Anthony (2000, in Min et al., 2005) state that collaboration happens when there is an alliance between two or more partners to create new value together. Anthony (2000 in Min et al., 2005) also claim that collaboration is about sharing the responsibility of exchanging common planning, management, execution and performance measurement information. Collaboration is about sharing what you have with others (Kanter, 1994).

Organizations are constantly under pressure to perform better, and therefore they are always looking to improve. One way of trying to improve communication and collaboration in an organization is by using an intranet. By making available communication tools such as email and forums, the capability to share files, data and information, and also the sharing of software, an intranet facilitates both communication and collaboration for an organization. In fact, Stenmark (2002) and Lai (2001) both argue that an intranet is a tool for organizations that *consists* of information. Of course, implementing an intranet will not solve an organizations information problem, but it has the potential to affect the way an organization communicate and collaborate.

As communication and collaboration is crucial to organizations, and intranets are widely used with the intention of improving the organizations communication and collaboration, the impact intranets have on communication and collaboration is an interesting issue to study.

## 1.1 Problem statement

Intranets have the potential to impact an organizations communication and collaboration. As stated in the introduction, intranets can be used for a variety of purposes but are mainly a tool that consists of information, as Stenmark (2002) proposes. Mainly, intranets are used for information sharing, communication and collaboration (Stenmark, 2002) and since organizations

are dependent on these aspects, organizations are also dependent on their intranets. As intranets are used to impact an organizations communication and collaboration, we want to find out how the intranets are actually being used and how this impacts the organizations communication and collaboration.

## **1.2 Research question**

How do organizations use the intranet for communication and collaboration?

## **1.3 Purpose**

We intend to identify how an organization use and work with their intranet regarding communication and collaboration. We also want to describe when and if the organization use the intranet for communicating and collaborating.

## **1.4 Delimitations**

This study focuses on communication and collaboration in relation to the intranet. Traditional communication theory will be used to some extent however since we are dealing with intranets, computer mediated communication and communication related to intranets will make up the bulk of our communication theory. Traditional collaboration theory has been downplayed for the benefit for intranet related collaboration theory. Any and all technical aspects of intranets will not be subject to investigate in our study.

## 2 Theoretical backgrounds

In order for us to examine how intranets affect communication and collaboration in an organization, we decided to explore theories about intranets, communication, computer mediated communication, communication and intranets, collaboration and finally collaboration and intranets. Firstly, we needed to examine what an intranet really is, what it can do, and what its potential to change communication and collaboration is. Next, we needed to examine communication and collaboration in order to find out what they are made up of, and how they might change with the introduction of an intranet. Logically, we then set out to find studies about how communication and collaboration (independently) are affected by the use of an intranet directly. We also sought out literature dealing with computer mediated communication (CMC). Not written specifically with intranets in mind, communication via intranets is by default computer mediated communication, and theories about CMC therefore should hold true for intranets as well.

### 2.1 Intranets

Stenmark (2002) defines an intranet as a place to share information, to communicate and to collaborate. This communication, collaboration and sharing of information can be facilitated by the intranet by means of email (Buffa, 2006), but an intranet can also consist of a newsfeed, discussion boards, file sharing abilities, planning tools etc..

An intranet is a cost effective and efficient approach to support strategies in an organization. Aspects an intranet can handle are disseminating organizational documents, forms, news, policies, phone directories, product specifications and pricing information. The intranets are also used to integrate individual, group, departmental and corporate communications. The managers are also looking at the intranets as a way to develop the organizations business strategy for the better. (Lai, 2001)

Further aspects an intranet can handle for an organization is bringing together people that work in different places. People across the world can communicate and collaborate with each other through an intranet. The people in the organization can interact with each other in real-time to share organizational information throughout the whole company. (Lai, 2001)

An intranet has three different perspectives according to Stenmark (2002); information, awareness and communication. When it comes to the *information perspective* the intranet will give information to the users in the organization since it is built-in feature in the intranet. This information perspective gives the users access to more information than they probably would get without an intranet. The *awareness perspective* gives the user a possibility to discover information that might not have been found otherwise. Lastly the *communication perspective* gives the users the possibility to interact with each other. The available information becomes



distributed and can be discussed. Different conversations and negotiations can take place. (Stenmark, 2002)

When choosing to implement an intranet the organization often expects to have more effective business processes and also improvements in organizational performance. The technology can help the organization to maintain or enhance their competitiveness in the market. (Lai, 2001) The intranet provides an opportunity to integrate and navigate the organizations scattered data with a minimal cost. Any organization can have a paperless office with the help of an intranet. When using an intranet you can rely on it to store, distribute, dispose, maintain and print organizational documents electronically. By doing so, the organization can focus on enriching the working lives of the employees and also help them to become more productive. (Lai, 2001)

One benefit with an intranet is that it facilitates internal corporate communication. Four different categories of benefits with intranets have been identified: data access, cost savings, communication and management. (Lai, 2001)

Organizational size affects intranet usage. It affects the innovation adoption and diffusion. The size will most likely lead to economics of scale and enhancing the feasibility of innovation adoption. There are also other things that it can lead to that aren't that positive. It can lead to exposure to the innovations for infusion and opportunity to spread it. This may happen since a larger organization also interact more with the world outside the organization itself. In intranet implementation is successful when it is used by the users on their in choice. (Lai, 2001)

An organization that uses an intranet-based collaboration has a lot better employee performance and organizational performance than the ones that does not use an intranet-based collaboration. (Lai, 2001)

## 2.2 Communication

There is a plethora of communication literature, with models, practices and different phenomena regarding communication. However, since we are investigating the effects of intranets on communication, only a small part of general communication theory is applicable to our study. Communication concerning intranets directly, and computer mediated communication covers most of our theoretical needs, and we have therefore chosen to ignore most of the traditional communication theories. There is however some traditional communication terms that are relevant for our study and these are presented next.

There are a number of different perspectives dealing with communication within an organization, all with their different explanations, reality perception and central issues. We have chosen to use the *classical perspective*, since we considered that its simplicity and use of the sender-receiver model, where messages are perceived as something which is to be moved about in the organization, both up and down and laterally, would best fit our research. The classical perspective is also the perspective used (knowingly or otherwise) by most practitioners of communication, i.e. management and PR professionals (Heide et al, 2008).

The classical approach to organization communication can be compared to a machine (Heide et al., 2008). This means, that if something is changed by management, the effects trickle down and affects the employees as well (ibid.). The classical approach also incorporates the division of communication and organization making the two into separate entities (ibid.) which means that we can study the effect of communication on an organization.

When talking about communication, one can either focus on the meaning of communication or the actual process of communication in itself. The process of communication can be divided up into 4 parts; source, recipient, medium and distortion. The source is the entity who wishes to send information, and the recipient is the receiver of the information. The medium is the way communication is carried out, i.e. a telephone, by mail or by the Internet. Distortion refers to any interference with the communication making the information harder to interpret for the recipient. When the distortion is to the degree that the receiver misinterprets the information, the communication is said to have failed. The ultimate goal of communication is to eliminate the distortion to the highest possible degree. (Fiske, 1997)

Two notions commonly used when discussing communication is *push – pull* and *information overload*. Push-pull is interesting for our study since an intranet very much allows for information to be pulled, but at the same time equally allows information to be pushed. With the capabilities for both push and pull, what and how information is communicated should be interesting to observe.

With the massive amount of information available on an intranet, the concept of information overload becomes a real concern and matter of interest to this study. Seeing how the theories of push-pull and information overload are also linked, with pushed information creating the possibility of information overload, another level of interest is created for the theories as to how the communication and collaboration is impacted by the use of an intranet.

For the individual workers of an organization to successfully accomplish their tasks, relevant and easily accessible information is needed (Choo, 1998). Information can be communicated within an organization either via a *push*, or a *pull*. A push of information is when information is given to someone, whether they want it or not. An example of a push could be an e-mail sent to all employees from the CEO. The employees have not asked for the e-mail and have no choice if they want to receive it or not. A pull on the other hand, is when the recipient actively goes on the hunt for specific information she needs right now. Using pull to gather information requires awareness of what information is needed, whereas the push method eliminates this need, instead adding the possibility of information overload. (Martin-Flatin, 1998)

The quality of a person's decision making relies on the amount of accurate information the person is exposed to. With an adequate amount of information, the performance of a person (including decision making) improves. However, this is only true up to a certain point, beyond which, the quality and performance of the individual rapidly decreases as she is exposed to, too much information, the phenomena known as *information overload*. Intranets are widely recognized as a big contributor to information overload, due to the vast amount and highly diverse spectrum of information available on an intranet, coupled with multiple access routes,

further adding to the cluttering of the information. (Eppler & Mengis, 2004)

## 2.3 Computer mediated communication

Computer mediated communication (CMC) is communication which is intended to enhance both the ability and the actual effect of communication, through the help of computers (Wu, 1996 in Chen & Liu, 2006). CMC has some basic traits:

1) *Distantless*: The use of the internet as a facilitator for communication means that theoretically, every person everywhere on the planet can communicate with others at any time (Wu, 2001, in Chen & Liu, 2006). Kirkman & Mathieu (2005) writes that geographically dispersed work teams are a prime candidate for using the distantless advantage of computer mediated communication, but that team's that are located in the same area may also choose to use computer mediated communication as their preferred communication method.

2) *Non-synchronization*: Unlike traditional media, CMC is not lost once the communication is over. Communication over the internet can be saved for years, whereas a television broadcast or face to face communication expires the moment it ends. Furthermore, CMC can be accessed at any time, eliminating time as a factor for communication. (Wu, 1996 in Chen & Liu, 2006)

Contrary to the assumption that asynchronous communication leads to a lowering of communication quality, asynchronous communication allows for time and effort being put into responses, with the aid of any external information and additional research into the subject further enriching and improving the communication (Warkentin et al., 1997).

3) *Interactivity*: With emails, forums, bulletin board systems, blogs, comments etc, CMC gives everyone in the communication a chance to respond. Unlike traditional media of TV:s and newspapers, and more akin to a face to face communication, everyone has the ability to be a content creator when using CMC. (Wu, 1996 in Chen & Liu, 2006)

This list of traits also includes "Transparency", which we choose to leave out of the study, since it deals mainly with the technical standards making communication possible, of which this study has no interest.

CMC increases the volume of communication taking place compared to face to face communication (Hiltz et al., 1986). With the amount of communication going up, the efficiency of the communication also needs to go up. But research shows that communication via computers in order to solve a task is no more efficient then face to face communication (Gallupe and McKeen 1990). CMC does lack some fundamental aspects of face to face communication such as social clues, facial expressions and body language which lowers its efficiency (Chen & Liu, 2006). Some scholars however, believe that CMC could replace face to face communication, arguing that given time to develop relational ties, CMC can be just as effective as face to face communication (Chen & Liu, 2006; Warkentin et al., 1997).

Furthermore, face to face communication is faster than CMC (Gallupe and McKeen 1990). Nevertheless, CMC tends to be of social value, humorous, and also helpful in solving real world problems (Rafaeli & Sudweeks, 1997). But using CMC also has some negative effects. Persons who uses CMC for more than 90 % of their communication suffer significant detrimental effects on their mood, task effectiveness, non task effectiveness as well as a lowered affective commitment towards the task at hand (Bettenhausen et al., 2009).

There is no consensus whether or not CMC adds distortion compared to face to face communication (Marshall & Novick, 1995). Distortion could be added due to the fact that social cues are harder to decode in CMC (Sproull & Kiesler, 1986). However, CMC has been shown to both add distortion due to the lack of visual stimuli during the communication, but also that the lack of visual stimuli does not alter the level of distortion (Marshall & Novick, 1995). In fact, some studies show that the removal of visual stimuli lessens the distortion and increases the level of message understanding altogether (Strauss and Miles, 1998).

Given the difficulties of social decoding, the social context in which the communication takes place is of the utmost importance (Ferrara et al. 1990, Spears and Lea 1994). But given the right amount of contextual information, it is possible to get a very high degree of communication understanding in CMC, whereupon distance and lack of social cues stops being a hindrance for cohesive communication (Abel, 1990 in DeSanctis & Monge, 1998).

*Media richness* theory binds together the complexity of a task with the medium chosen for it. Daft & Lengel (1986) propose that the medium for communication becomes less rich as channel capacity decreases from face to face meetings, to telephone communication to CMC. It was therefore suggested, that mediums that have a high capacity (such as face to face meetings) should be used when dealing with equivocal communication, and lesser capacity mediums (such as CMC) should be used only for unequivocal tasks. Zack (1993) writes that since face to face communication is very interactive, it is useful when the communication is meant to build a shared and mutual context for the task at hand, whereas the lower capacity CMC should be used when the context is already established. The ability to choose the correct medium for communication is crucial in order for the communication to be effective (ibid.).

But electronic communication is heavily determined by the *norms* in the surrounding context of which the communication takes place (Ferrara et al., 1990). This statement is also supported by other studies (Abel 1990, Lea and Spears 1991, Spears and Lea 1994, in DeSanctis & Monge, 1998) claiming that communication is less a matter of medium, and more of norms, practices and social conditioning, influencing the media choice. Furthermore, organizations, groups and individuals develop styles of communication for themselves, and it is possible given organizational support to use low capacity CMC for complex communication (Finholt & Sproull, 1990).

Finally, there are several studies claiming that CMC leads to a greater equality in communication and provide less formal relations even laterally in the organization. This is not a guarantee however, as some studies point away from the fact that equalization occurs due to the use of CMC. Still, the literature supports the findings that communication occurs with a greater boundary span both culturally and functionally as well as a greater occurrence of lateral

communication within the organization when CMC is being used. (DeSanctis & Monge, 1998)

## 2.4 Communication and the intranet

Intranets improve employee communications (Koprowski, 1997). An intranet has also been found to communicate relevant, current and accurate information (Bedsole, 1999). Intranets also increase communication, facilitating a higher effectiveness in an organizations employee (Hills, undated, in Buchanan-Oliver et al., undated). The communication within an intranet is cheap, quick and effective compared to traditional ways of communicating (Gupta, 1997, in Buchanan-Oliver et al., undated).

With the more cost effective communication an intranet facilitates, employees are free to communicate ideas more freely, involving them in the decision making process of the organization (Lai, 2001). Furthermore, the use of an intranet for communication increases human productivity and decreases the use of paper (Kuzmits, 1998).

According to Gupta (1997, in Buchanan-Oliver et al., undated) the major benefits from using an intranet has been identified as communication both within an organization and to the organizations *external stakeholders*. This communication strengthens the relationships within the organization as well as to the external stakeholders. Keeping a well maintained, long term relationship with your customers is the way to keep an organization highly profitable (Gronroos, 1990). It is also very important to build strong relations between the organizations employees for an organization to be successful and these relations can be inexpensively yet very effectively built with the help of an intranet (Gulati, 1997, in Buchanan-Oliver et al., undated).

The information on the intranet needs to be *accurate* and up to date if it is to be of any use to the users of the intranet. This is hard to attain, since it would require continuously revising and fact checking of the information on the intranet. But if the information on the intranet isn't credible, users of the intranet will stop trusting the information, and get the information from somewhere else. (Blackmore, 2001)

Further adding to the negative attitude of employees towards the intranet is *top governing*. Many top executives see IT as a solution to the ever-growing need for information. The executives therefore implement intranets, and often also govern their use. They (the executives) load the intranet up with information they believe useful for the users, thereby leaving everything else out of the intranet, resulting of course in the fact that the users cannot access the kind of information they want and need, only the information the executives have loaded into the intranet. This resulting lack of information leaves the intranet unused and unappreciated by its intended users. (Brown & Duguid, 2000)

Not only should the information be available and accurate, it should be simple to find as well. Implementing an intranet means focusing the information away from newsletters, physical bulletin boards and everything else, into the intranet. This is an advantage of the intranet, since everything is now collected into the intranet, with all of the organizations information at one place. But it's also a disadvantage for the same reason. Due to the fact that all information is now

gathered at the same place, it can get cluttered, and information can be missed or overlooked by some members of the organization. (Bark & Heide, 2002)

If the users, for whatever reason shy away from the intranet, it diminishes in value to the organization. An intranet is used primarily to disseminate information to enhance the organizations business activities. Therefore, the more information on the intranet, the more knowledgeable the organizations employees will be when they use the intranet as a communications tool. (Buchanan-Oliver et al., undated)

Information is only valuable if it is available and being used. When publishing something on an intranet the whole organization will have access to it, and the information increases in value. However, individuals might have certain reasons to keep their expertise to themselves. This nesting of information needs to be shut down, with an encouragement and reward to users who spread information on the intranet. (Blackmore, 2001)

## **2.5 Collaboration**

Collaboration technologies and communication can be put together. This brings message, voice conferencing, information sharing and presence together in one single account for the user. (Doyle, 2008)

According to Kanter (1994) and Anthony (2000 in Min et al., 2005) collaboration involves an alliance between two or more partners to create new value together. Anthony (2000 in Min et al., 2005) also argue that collaboration is about sharing the responsibility of exchanging common planning, management, execution and performance measurement information. It is about sharing what you have with others (Kanter, 1994).

Hansen & Nohria (2004) explain collaboration as the sharing of knowledge, developing new products and services together. Big companies are able to stimulate and support collaboration within their organization and they will be better to take advantage of its dispersed resources and capabilities in subsidiaries and divisions no matter where they are located in the world. (Hansen & Nohria, 2004) A lot can come out of collaborating with other companies. It can be used as the ultimate core capability (Sanders & Premus, 2005 in Min et al., 2005).

Collaboration can be seen as an advantage because it is not something that only occurs on its own. There are several barriers to overcome that can impede collaboration in complex multiunit organizations. The organization has to overcome those barriers and to do that they have to develop distinct organizing capabilities that isn't easy to imitate. (Hansen & Nohria, 2004)

Collaboration can create a substantial value but it also has reverse side. Firstly, it might easily be overdone. Collaborate initiative could result in employee participation in various meetings where nothing of substance is accomplished. Unproductive collaboration occurs and may undermine the company's performance. (Hansen & Nohria, 2004)

## 2.6 Intranet and collaboration

Different organizations view the importance of collaboration differently, and this relates directly to ideas about why company's exists and the reasons for it (Hansen & Nohria, 2004). Intranets allow organizations to collaborate and share information within the whole organization (Damsgaard & Scheepers, 1999).

Intranets are according to Buffa (2006) a communication tool that is used to improve knowledge sharing between members in an organization.

According to Min et al. (2005) there are five different key collaboration activities needed to reach a successful collaboration. They can be used to guide the daily business and the long-term planning as well. The key activities are: sharing information, joint planning, joint problem solving, performance measurement and leveraging resource skills. (Min et al., 2005)

*Shared information* is the center of collaboration since it is required on a daily basis. Information is shared between different parties and gives them a common base for them and triggers a flow of products, services, funds and feedback between the parties that get the information. The information sharing becomes a matter of routine that occurs on several levels in the company. (Min et al., 2005)

Information sharing can occur in different ways and for different reasons. It can happen in periodic review session or informally between collaborative partners. The shared information can help companies to correct actions that relate to flows of raw material, finished goods and services as needed. (Min et al., 2005)

The next component in collaboration is *joint planning* and it is closely related to and even dependent on information sharing. Collaboration begins with joint business planning between the partners that collaborate and it is the information that drives the collaboration. Companies can share information about prognoses and other parts of planning. In return they get quick information about changes in the capacity outlook. The joint planning is important to co-align operations and capacities of the collaborative partner. (Min et al., 2005)

Collaboration can help to *solve problems* and to do this collaborative partners have to work together. Companies solve problems together since it can give them improved ideas that have been developed jointly. Joint problem solving is accomplished by co-locating each other's personnel or through cross-functional teams. To reach joint problem solving an "Alliance Team" is developed and consists of persons from every organization and represents different functional areas. The team meets up regularly to discuss and solve the problems ranging from quality control to distribution operations. Solving problems together often result in a boundary break down between the collaborative partners. (Min et al., 2005)

Collaboration can also help with *joint performance measurement* in an organization. Collaboration success can't be guaranteed unless the results are properly monitored and measured. To determine rewards for successful collaboration some common metrics should be developed. Performance gaps should also be identified. To do this key performance indicators

are used to reach common goals in specific targets on costs, productivity and savings. (Min et al., 2005)

The last thing that collaboration helps with through an intranet is to *leverage resources and skills*. When companies start to collaborate they want to get something out of it and often they expect to “grow” individual business and obtain desired reward. To be able to achieve this it often is about leveraging the resource skills the collaborative partner has. The collaborative partners use each other to get the kind of resources and skills they are missing and by that they can reach specialization. This means that the company do the things they are good at and do best and their suppliers do the things they do best. This way they help each other with the work. (Min et al, 2005)

## 2.7 Summary

In order for the reader to quickly repeat or gain a quick overview of the theoretical background, we here present a summary of the theoretical chapter of our study. The theory here creates the foundation upon which our data is collected (more about this in chapter 3). We covered 6 areas:

Table 2.1 Summary of our theoretical background

<b>Intranets</b>	An intranet facilitates communication and collaboration by providing such tools as email, newsfeeds, discussion boards, file sharing abilities, planning tools etc. It brings together people who are geographically dispersed, and help organizations to remain competitive. Scattered data can be navigated at minimal cost. Communication and managing benefits from an intranet.
<b>Communication</b>	Here we focus on a classical perspective of communication, where messages are thought as entities sent back and forward in a sender receiver model. In this model, distortion is interference with the message, and the medium is the way the message is transferred. A sender and receiver is also necessary. Information can be voluntarily collected where upon its method of retrieval is called a “pull”, or it can be forced out upon its recipients, constituting a “push”. Information overload occurs when a subject is exposed to, too much information.
<b>Computer mediated communication</b>	CMC is distantless, non synchronic and interactive. CMC increases the amount of communication at an organization, and can also increase the efficiency of the communication. Since CMC is a fairly low capacity medium, communicating rich messages via CMC could lead to distortion, although this is a matter of debate in the literature. CMC can also lead to boundary spanning communication. Electronic communication can be heavily dependent on the norms surrounding the sender and receiver. Finally, CMC can lead to an increase in the communication equality, with less formal relations as a result.
<b>Communication and intranets</b>	An intranet can provide relevant, current and accurate information cheap, quick and effective, which is also easy to find.. For an intranet to function properly, its important to share information, that the information is credible, that the information is easy to find, and that the information is not governed by upper management. If users shy away from the intranet, its value is diminished.
<b>Collaboration</b>	Collaboration is about sharing knowledge, creating new value and working towards a common goal. Messages, voice conferencing, information sharing is collected into a single account for the user. Alliances are required in order to create value together. Collaboration is about sharing the responsibility of exchanging common planning, management, execution and performance measurement information. Collaboration is also sharing knowledge and developing new products and services together. There is also a flip side to



	collaboration, as it can easily be overdone.
<b>Collaboration and intranets</b>	The intranet is used differently by different organizations. However, there are five key aspects for collaboration on the intranet; shared information, joint planning, joint problem solving, joint performance measuring and finally, leveraging resources and skills.

## 3 Method

We (the authors of this study) both early on agreed that we wanted to investigate an intranet and how it is used when it comes to communication and collaboration. We wanted to look at the intranet and how the organization uses it, describe how and if they use it for communicating and collaborating. To do this we formulated our research question as: How do organizations use the intranet for collaboration and communication?

Since our research question concerns intranets, communication and collaboration the next step in our research was to do a literature review dealing with these different subjects. Information about intranets was found almost exclusively in online scientific papers. These papers were found using academic search engines i.e. ELIN, Google Scholar and the like, by searching for keywords like “intranet”, “intranet communication”, “intranet collaboration” et cetera.

After the reviewing of literature we constructed the theoretical background with these areas: intranets, communication, computer mediated communication, communication and intranets, collaboration and collaboration and intranets. After doing this we came to the conclusion that we needed a deeper understanding to give an answer to the question. This is why we decided to do a qualitative study. A qualitative study leads to a deep and detailed understanding of the phenomena investigated (Cresswell, 2007). To gain this deeper understanding, we chose to conduct semi structured interviews, since these interviews will give us a targeted focus upon our research issue, thus deciding upon doing a qualitative study with interviews as the data collection method.

After doing these initial phases an empirical investigation was designed. We interviewed three employees at one company in the building industry about their intranet. The findings from the interviews are presented together with analysis and discussion in section four which is followed by the conclusion to conclude the study.

### 3.1 Selection and presentation of the company

When searching for an organization to interview in order to collect data for our study, our requirements on the organization were that they use an intranet. Seeing how intranets are commonplace nowadays, finding an organization was fairly easy. After a few phone calls with an organization we had their approval to interview their employees about their use of the company intranet.

Due to the fact that the company involved in our study wishes to keep their identity confidential, we will not be disclosing any names of its employees, or indeed, of the company itself. We will however, present some information about the company in order to provide an insight as to what kind of organization we have been interacting with.

The company, which hereafter shall be known as Company Alpha, is listed on the stock exchange, has over 5000 employees, offices in 11 countries and is currently taking assignments in over 90 countries. Our dealings with the company however, were constrained to a local office in Sweden. Company Alpha is a consulting firm dealing with a diverse range of work, including architecture, installations, construction, infrastructure, plumbing, energy, geographical IT and project management. Assignments can range from pre-studies, investigations, strategic planning, design, construction and managing projects.

We set up an interview with our contact person at Company Alpha. The other interviews were set up by our contact person, as he sent out an email asking for volunteers to be interviewed. Three persons responded, and two of these were subsequently interviewed. The third person could not find time in his schedule to be interviewed. We thus interviewed three people at Company Alpha. The selection of the interviewees was not influenced by us but rather chosen for us by our initial contact at Company Alpha, but this was fine since there were no requirements from our side except that the interviewees used the intranet, which they all did.

Since the organization wishes to keep their identity confidential, we shall try to do so for our interviewees as well. Interviewee A is male, works with ventilation design, energy calculations, energy declarations etc. and has more than 10 years of experience in the business. Interviewee B is female, works with layout design for air treatment design for ventilation systems and has more than 10 years of experience in the business. Finally interviewee C is male, designs VVS and has about 4 years of experience in the business.

## **3.2 Data collection and analysis techniques**

### **3.2.1 A semi structured interview**

A semi structured interview helps move the interview along, but also allows for divergence from the script where needed (Kvale & Brinkmann, 2009). This suited our needs, since we had certain issues from the literature we wanted to investigate, but also were interested in unexpected information which our interviewees could offer. We followed our interview guide, moving along the different themes, but where we felt that our interviewees had interesting information they were allowed to diverge from the guide in their answers.

### **3.2.2 Thematizing**

The purpose of doing the interviews is to find out more about the intranet and if it is used for communicating and collaborating. Thematizing is something that Kvale & Brinkmann (2009) refer to as something you do to formulate research questions and clarify the theory. We choose to thematize the interview into different sections, each containing a specific part of our interest area (see table 3.1). Doing so was a great help in conducting the interviews, as it made sure that every interviewee was asked the whole spectrum of questions, instead of delving deep into one subject,

only to run out of time to investigate the other subjects properly. The answers we got were also open and made it possible for us to have discussions about the answers. We believe that if we would have had a strict questionnaire we would not have gotten the opened answers we were looking for.

Table 3.1, Thematising the interview

General questions	Communication	CMC	Communication and the intranet	Collaboration	Collaboration and the intranet
General questions about the interviewee person, and their usage of the intranet. This was done in order to create an overview of the interviewee and their relation to the intranet.	Questions pertaining to communication, such as questions about information overload, push/pull and distortion. This part is more general, not yet handling communication via CMC or an intranet.	Questions about how the uses of computers effect the communication of our interviewee subjects	In this segment, we investigate how the intranet specifically impacts communication	General questions about collaboration, containing but not limited to questions such as how and why collaboration occurs.	Questions about how the intranet relates to collaboration. Joint planning, shared information, joint problem solving, joint performance measurement and the leverage of resources and skill are areas covered.

Note that the thematization roughly follows the same 6 areas of interest that can be found in chapter 2, our literature review. Only difference is, the intranet section is here replaced by a section combining both the intranet and the interviewee. Thematising the interview this way ensured that all the topics from our literature review were included during the data gathering, a prerequisite for our study.

### 3.2.3 Conducting the interviews

The interviews took place at Company Alpha’s offices in Lund, Sweden. The interviews were conducted in person because the interviewees are located close by. Meeting the interviewees in person helped us to ensure a better quality in the study. The interviews took place with the two of us and the interviewee, in the interviewee’s office. During the interviews we also decided to take notes when the other asked question to make sure we didn’t lose any information. The interviews were also recorded in order to ensure quality and not to lose any information. All of the interviews were conducted in Swedish since Swedish was the native tongue for all of the parties participating in the interviews. Conducting the interviews in Swedish also helped us with quality, since the participants could better describe their answers and this helped us get all of the information we wanted. It made it easier for them to describe what they wanted to describe. The interviews took about 45 minutes each and everything was recorded and then transcribed.

To start the interview we introduced the interviewees about the purpose of the study and gave them a little introduction to what our study is about. We also asked them if it was okay for us to

record the interview. To record the interviews we used a mobile phone to help us with the transcriptions and prevent us from making misinterpretations about what had been said. Recording the interviews helped us to focus more on the interview and what was said. To end the interview we asked the respondent if they had something more to add or if there were something they felt they wanted to bring up. Then we informed them a bit about the analyzing of the data, how the information would be handled and if they wanted to be confidential or if any information given was sensitive.

### 3.2.4 Transcribing

The transcribing was done immediately after the interviews were conducted in order to get the accuracy of the transcription as high as possible. The notes taken by us during the interviews were helpful here, not just as a guide for the time-lapse of the recording, but also to get a quick summary of what had been said when the need arose. We choose to transform the spoken Swedish into written Swedish, in order of the interviews to be more legible. We do not feel that any information useable to us was lost by doing so. Then the transcription was sent to the interviewees to validate the correctness of it. They weren't allowed to change anything but they could help us to minimize misunderstandings that could have occurred. No objections were noted by the interviewees, whereupon we started the analysis of the interviews.

### 3.2.5 Coding and analyzing the interviews

In order to make the analysis part of our study both as straight forward and as accurate as possible, we coded our interviewees answer according to what subject they were talking about at the moment. This was done, because even if a question was asked about i.e. communication, our semi structured interview style often allowed other subjects to be discussed at the same time, in the same answer. Therefore, it was imperative that we code the answers, last we miss the interviewee's answers to a certain field because we expected the section not to include the topic. See table 3.1 for an example of the coding. This division of answers is what Jacobsen (2002) would label categorization. The categorization then made it easier for us to compare our findings with what others have said and then discuss it. These categories were also used when constructing the interview guide that you find in appendix 2.

The coding and categories respectively are:

- Gen - for general information about the interviewee
- Int - for information concerning the intranet itself
- Com - for communication
- CMC - answers pertaining to computer mediated communication
- ICom - the intranet and communication
- Col - for collaboration
- ICOI - for the intranet and collaboration

We also numbered the questions, doing so helped us quickly find where a quote came from, allowed us to compare answers with ease, and in general improved the browsing of the coded

answers. When presenting the analysis, we chose to create boxes depicting the interviewees answers on the different subjects, the compiling of these boxes were made easier by the previous coding.

Table 3.2 Example of coding

	<i>Qcom01</i>	<i>Hur viktigt är tillförlitlig och lättåtkomlig information för att du ska klara dina jobbuppgifter?</i>
<i>Com</i>		Det är ju vitalt att man har informationen man behöver för att göra sitt jobb det säger ju sig själv.
<i>Int</i>		Men ibland har man inte den, och då får man lägga ner projektet ett tag och jobba på något annat. Det finns alltid många projekt igång samtidigt. Det skulle vara bra om allt som man behövde fanns i intranätet, men jag tror inte att det skulle fungera, det är hundratals ritningar och annat som skulle behöva läggas in.
	<i>Qcom02</i>	<i>Vad är ditt föredragna medium för kommunikation? (Ansikte mot ansikte, telefon, intranät etc.)</i>
<i>Com</i>		Alltså, det förekommer väldigt lite kommunikation från mig via intranätet. Det blir att man ringer, eller om man ska skicka ritningar så gör man det via e-post.

### 3.3 Research quality

#### 3.3.1 Reliability

When starting this study we wanted it to be possible to follow every step and for future researcher to be able to do our study all over again. This is what Seale (1999) discusses as reliability. To be able to reconstruct our study we have documented everything we have done and tried to describe it as detailed as possible here in section 3. To us it is important that other observers can look at our study and not only redo it but also make the same interpretations from the collected data. We have put a lot of effort on this section because we feel that it is important to make sure that the research is reliable. We have described our decisions and the reasons behind them as detailed as we could. By doing this we believe that we have managed to enhance the reliability and made it easier for others to reconstruct the research.

#### 3.3.2 Validity

With validity we refer to doing the right thing and as Seale (1999) discusses there are both internal and external validity. An important aspect for us has been to give the reader a logical design for the readers. We have tried to give the reader the study in an understandable way and discussed the problems that have occurred along the way.

We have also provided our reasons for choosing different paths in chosen theories and why they tell us what we need to give the answers of the research question. All of the choices have been discussed among us and in some case with other persons that have good knowledge in the area.

Internal validity refers to that you really measure what you say you measure (Seal, 1999). This is something that we have tried to attain by giving the reader the transcripts for them to make their own opinion of whether we have made the right interpretations of how we have presented the interviews. External validity refers to the study being valid for more than one context (Seal, 1999). To ensure external reliability we tried to interview as many informants as we could with

different positions in the organization. We also tried to get a random sample of informants to get a wider picture; with this we mean that we have interviewed persons with different genders and different positions in the company. They have also been working with the intranet for a different amount of time. Another thing that we have tried to do is to give the reader detailed information about the study for them to judge the applicability of our findings to other studies as they see fit. In our case we think that our result can be applied on other case that uses the same kind of intranet with the same kind of functionality. Other intranets might work in different ways and therefore might differ in their results.

### **3.3.3 Ethics**

Throughout the whole research study we have made sure that we kept ethics in mind. To us it was very important to consider ethics when it came to the interviews and the interviewees. We looked at Israel & Hay (2006) guidelines about informed consent and confidentiality. We didn't want to cause problems for the informants or give them difficulties. If they wanted to be anonymous they are going to be that and they have been informed about the research before they chose to participate. A reason for acting in an ethical way is that we wanted to be able to gain more accurate information and result. This is why we have considered the ethical aspect throughout the whole study.

The first thing that we told our interviewees when we talked to them was to explain what we were doing and how we were going to do it. We informed the interviewees with information about what we expected out of the interviews, what tools, models and techniques we were going to use and what kind of questions we were going to ask. After that they could choose to participate in our study or not (Jacobsen, 2002). The organization name is confidential and because of that we have chosen not to use the interviewees name anywhere in the study. We did this to show them respect and take their request in consideration. Confidentiality is something that Kvale & Brinkmann (2009) discusses as not showing private data or telling who has told you what.

## 4 Analysis and discussion

### 4.1 Communication

#### 4.1.1 Availability of information

Table 4.1 Availability of information

Interviewee A	Interviewee B	Interviewee C
<p>Argues that while information is vital, the amount of information within the company is too vast to insert everything into the intranet.  <i>Qcom01</i></p> <p>Even if the information is present in the system, it might not be available since information is cluttered and hard to find.  <i>Qcom03</i></p>	<p>Finds finding information is troublesome, to the point of doubting if the data exist at all, even if it might.  <i>Qcom03</i></p>	<p>Information is crucial for every project. Without it, work stops.  <i>Qcom01</i></p> <p>Everything needed is in the intranet. But it is hard to find, the search functions need to be improved.  <i>Qcomi02</i></p> <p>Everything is available on the intranet, but it is hard to find.  <i>Qcom04</i></p>

An organization as well as its employees needs accurate and timely information in order to be successful and make the right decisions. This is reflected both in the theory of communication, as well as in our interviews. Our interviewees were quite adamant in supporting the fact that without the proper information, neither the project nor their individual work can progress. However, our interviewees are in disagreement whether all the information they need is available through the intranet. Our first subject does not believe it to be practically doable to collect all information on the intranet, since the sheer number of blue prints and the like would make the task unsurpassable. Interviewee B does not know the extent of information available on the intranet, since she finds the intranet to be cluttered. Interviewee C believes that everything is available on the intranet, but agrees with interviewee B, that the intranet is a mess, and that finding information on the intranet needs to be much easier.

The fact that the three interviewees have different opinions about the level of information on the intranet could be attributed to the fact that interviewee A and B simply cannot find the information on the intranet. But this is debunked since interviewee C also claims to have major difficulties in navigating the intranet successfully but still manages to find the information he is after. The three interviewees have roughly the same work tasks, mostly designing in CAD, and therefore their sought after information should be the same or very similar.



### 4.1.2 Information overload

Table 4.2 Information overload

Interviewee A	Interviewee B	Interviewee C
<p>There are several functions not being used and not even discovered since the intranet is too hard to navigate.  <i>Qcomi03</i></p>	<p>Info about meetings, new blueprints, any sort of information might be pushed, originating both internally or from the external consultants.  <i>Qcom04</i></p> <p>The intranet contains an abundance of information, but it requires action in order to get it. It's hard to get a grip of the information. Too much email is also a problem.  <i>Qcom05</i></p> <p>Information can be hard to find to the point of its very existence being doubted.  <i>Qcom03</i></p>	<p>Does not consider himself subjected to information overload. Selectiveness is a must when retrieving information from the intranet.  <i>Qcom05</i></p> <p>Work assignments are pushed, everything else is pulled.  <i>Qcom04</i></p> <p>It is often faster to get information from a book or other similar sources than to retrieve it from the intranet.  <i>Qcom04</i></p>

The employees at Company Alpha do not feel that they are subjected to information overload. When asked about the role played by the intranets in information overload our subjects did not consider the two to be linked. "On the intranet, I pick and choose what I want to read", was a phrase used by two of our interviewees independently, in the belief that they therefore were not subjected to information overload.

Pulling information requires that the interviewee is aware of the specific information she needs right now, and then goes about trying to collect it (Martin-Flatin, 1998). Being aware of what information is needed is not the final obstacle, one needs to find the specific information as well. When asked about this, one interviewee gave an illustrating answer. He said that rules and basic descriptions are prerequisites for all projects. These rules and basic descriptions are all available on the intranet according to our interviewee. Yet he went on to tell us that he always substituted using on the intranet by reaching for a book, information sheet or wherever the information might be available. It's just easier he said, the intranet is full of information, but it is hard to find. The search function works poorly if at all. I know where something's are on the intranet, he went on to say, but it's still faster to look it up in a book. If a book is faster than the intranet when you know where the information is, imagine how much time it takes to get some information you don't know the location of.

Cluttered, highly diverse and vast information leads to information overload in an intranet setting (Eppler & Mengis, 2004), and these factors are regurgitated by our interviewees in our interview questions. It is therefore possible that our interviewees are being subjected to information overload without them self knowing it, perhaps attributing it to the frustration of not finding their sought after information.

More so contributing to information overload than when something is pulled, is when something is pushed, for example email (Eppler & Mengis, 2004). Ranging from meeting info, the

assignment of tasks and blue prints, from within the company or from external consultants, the emails received at Company Alpha is mostly justified and relevant, and our interviewees do not feel that there is too much information pushed to them.

### 4.1.3 Media richness vs. type of communication

Table 4.3 Media richness vs. type of communication

Interviewee A	Interviewee B	Interviewee C
<p>Prefers phone calls or face to face meetings, only deviating from this if a file needs to be attached, in which case email is used.  <i>Qcom02</i></p> <p>Each affiliate usually deals with their projects, therefore telephones or face to face communication is preferred.  <i>Qcolli01</i></p>	<p>The intranet does not feel natural for communication. Telephone or face to face meetings are preferred.  <i>Qcom02</i></p>	<p>If (physically) close to the person, always chooses face to face. Since the office is relatively small, this means face to face communication with everyone within the office, always. Outside the office the telephone is the preferred medium for communication. However, if files need attaching, email is used.  <i>Qcom02</i></p>

Our interviewees seem to agree about their preferred choice of medium. If at all possible, they prefer to communicate face to face. If this is not an option due to geographical distance or other obstacles, they prefer to use the telephone. Email is only used when something is supposed to be attached, like for example a blue print. We see that media richness does come to play to some extent, since email is deliberately used when a file needs to be attached. But for the most part, communication complexity and context state is not a consideration for the employees at Company Alpha when choosing their medium for communication. Since the employees (given the chance, and assuming no file needs to be attached) always chooses face to face meetings or telephone calls, they miss out on the potential of communicating effectively via the intranet. Choosing face to face or telephone could be a waste of time due to travel time or telephone tag involved with the two mediums for communication. It is clear that the employees have developed a style and norm, where face to face meetings and telephone calls are preferred.

### 4.1.4 Distortion

Table 4.4 Distortion

Interviewee A	Interviewee B	Interviewee C
<p>The information on the intranet is messy. It's hard to gain a full picture over it. An example with tax deductions is given, where the cluttered information results in failure to understand the directions/proceedings.  <i>Qcom03</i></p>	<p>When information is found, which can be a problem, the information is easy to comprehend.  <i>Qcom03</i></p>	<p>The intranet is thought to reduce distortion. The ability to read and re-read information on the intranet reduces misunderstandings.  <i>Qcom03</i></p>

Distortion is any and all interference with an attempt of communication which might lead to misinterpretation of the information, which in turn might lead to failure of communication (Fiske, 1997). Once again, our interviewees are of different opinions, this time regarding the distortion that happens in the intranet and email. Interviewee A feels that the information in general is messy and hard to interpret. Interviewee A also specifically complains about the information on the page for making deductions on his car, complaining about the lack of proper information and that it is hard to interpret buttons and boxes. The interviewee cannot figure out how to make deductions for his car, and therefore the information on that page becomes distorted to the point of communication failure.

Interviewee B and C have a different opinion. They both feel that the information on the intranet and email are easy to understand. Interviewee C even goes so far as to say that CMC reduces distortion, due to the fact that he can read for example the instructions of an email until he is satisfied he has got it right, claiming that the risk of mishearing or misunderstandings increases during a telephone call or face to face meeting, due to the fact that one cannot repeat the information at will later on.

The difference in our subjects' opinions towards distortion in CMC agrees with the existing literature, since there is no consensus amongst communication theories whether or not CMC adds to message distortion or not. But it is still the case that, some CMC like email lead to a lack of visual stimuli (such as body language), hard to decode social cues and hard to interpret context. Being argued in the theory is whether the lack of visual stimuli, social cues and context adds to the distortion or not. Whether or not it does, Company Alpha has by the use of templates standardized the information and to some extent reduced the need from social and contextual consideration when interpreting the information.

Whether or not distortion is caused by all of this there is a theory that if the two parties communicating are well known to each other, the context etc. does not matter as much. Interviewee C does not seem too bothered by the lack of visual stimuli, social cues or context when communicating via the intranet even with someone he does not know, but instead claims that communicating on the phone with someone not known to him is more difficult.

#### 4.1.5 The potential to store information

Table 4.5 The potential to store information

Interviewee A	Interviewee B	Interviewee C
Positive in the way that previous projects are available. <i>Qcmc03</i>	The project files with the associated files and email is saved in the project folders. Old blueprints etc. are also saved there. <i>Qcmc03</i>	Storing information is a big advantage, since this gives proof of the communication. During telephone conversations an email is often requested with the tasks at hand, in order to eliminate misunderstandings or conflicts about the tasks later. <i>Qcmc03</i>

The non-synchronization of CMC lends itself to storing of information. In an email, contrary to

let's say a telephone call; the information is sustained even after the communication is ended (Wu, 1996 in Chen & Liu, 2006). Time is eliminated as a factor. Though Wu does not say why this is a good thing, our interviewee subjects do. One of our interviewees said: "I use the stored information as evidence. That way, no one can tell me that I didn't do something, or did something wrong, because I can refer them to the sent email". Not just used for evidence, our interviewees goes on to explain that emails are a useful source for instructions, as one can read them over and over again, at any time. Furthermore, our interviewees goes on to tell us that previously done projects are saved on the intranet, along with the email communication for that project and any other resources that were used to complete the project. This could be useful, should similar projects appear in the future, or something needed to be fixed about the previous projects.

#### 4.1.6 Distantless

Table 4.6 Distantless

Interviewee A	Interviewee B	Interviewee C
Never works from home, but sometimes with people geographically dispersed. <i>Qcmc01</i>  If the collaboration involves for example Company Alphas office in Malmö, a relocation of personnel is preferred. <i>Qcol04</i>	Works from home frequently. The intranet is crucial for this, the right CAD version and the right files are needed, and can be accessed from home via the intranet. <i>Qcmc01</i>	Rarely works from home. The intranet is a prerequisite when it happens. Access to the project folders is needed which is provided by the intranet <i>Qcmc01</i>

Of our three interviewees, only one works from home on a regular basis, while one rarely works from home, and the third one never works from home. The two employees, who do work from home, agree that it would not be possible to do so without the intranet. By logging into the intranet from their homes, they have complete access to the project files, and the applications needed for them to do their work. Needless to say, without the project files and CAD applications, not much work would get done.

Kirkman & Mathieu (2005) claims that being geographically dispersed makes a work team an optimal candidate for CMC, and goes on to say that even teams located in the same area might choose CMC as their prime choice for communication. However, as presented in the section about media richness, the preferred method for communication at Company Alpha is still the telephone, resorting to email only if a blue print or other files need to be attached.

#### 4.1.7 Credibility

Table 4.7 Credibility

Interviewee A	Interviewee B	Interviewee C
The information on the intranet is up to date and accurate. Qcomi03	There are people whose responsibility it is to keep the information updated. Judgment is needed to evaluate which information is obsolete. Qcomi03	The information on the intranet is to 95 % updated and reliable. Sometimes old blueprints etc. remain. Qcomi03

The information on the intranet needs to be accurate and up to date if it is to be of any use to the users of the intranet. This is hard to attain, since it would require continuous revising and fact checking of the information on the intranet. But if the information on the intranet isn't credible, users of the intranet will stop trusting the information, and get the information from somewhere else. (Blackmore, 2001)

If the information available is not credible, users will distrust the intranet and stop using it (Blackmore, 2001). Interviewee B mentions that Company Alpha has a "teknik skrå" (roughly translated into "technology guild") which are responsible for keeping the intranet accurate and up to date. The general consensus amongst our interviewees is that the information mostly is accurate and up to speed. Where it is not, one must use one's own judgment, for example by checking the date. It seems that inaccurate information is not a deterrent for using the intranet at Company Alpha, but instead it is the access speed and difficulty in finding information that keeps users wary of the intranet.

#### 4.1.8 Creating content

Table 4.8 Creating content

Informant A	Informant B	Informant C
No incentive exists to post content to the intranet, and there are no advantages in doing so either. Once posted a flyer. Qcomi04	No other content then contributions in the project folders is created. Qcomi04	Occasionally posts to the forums. No incentive to create content has occurred. Qcomi04

Since the use of an intranet is very cost effective, employees are free to spread ideas freely and at a modest cost (Gupta, 1997, in Buchanan-Oliver et al., undated). And with emails, forums, blogs, comments etc, *anyone* within the organization has the opportunity to be a content creator (Wu, 1996 in Chen & Liu, 2006). This dissemination of information is the key to increasing the value of organizational information, and employees that distribute information (and thereby increase its value) should be rewarded (Blackmore, 2001). With the exception of the CAD files for the projects, almost no content creation is occurring at Company Alpha. With quotes like "There are no advantages to posting something to the intranet." and "We receive no encouragement or

incentive to post anything to the intranet”, it is clear that Company Alpha is not using its intranet in a way that increases the value of its information, and ultimately the value of the company itself.

#### 4.1.9 Volume and efficiency

Table 4.9 Volume and efficiency

Interviewee A	Interviewee B	Interviewee C
The intranet is used very little for communication. <i>Qcom02</i>	Email would be used more when cooperating with someone for example in Malmö. Time reports and bonus systems are very effective to hand in via the intranet. <i>Qcmc07</i>	Thinks that more communication is not had. The intranet is very effective in when it comes to certain types of communication, i.e. the news feed. <i>Qcmc07</i>

According to the Hiltz et al. (1986), CMC increases the amount of communication going on within an organization. This is also supported by our interviews, though it seems as the intranet isn't making our subjects create new communication, but rather taking part in existing communication that they would otherwise miss. The news feed on the intranet and the forum posts are used as examples.

Since the communication increases, it needs to be more efficient, which our subjects think it is. Said interviewee C: "... I think the intranet is very efficient for communication. Take the news feed for example, how else would we get the news? The intranet is really efficient for some things". His view is supported by interviewee B. She thinks that the time reports, bonus reports and task follow ups handed in via the intranet is a very efficient way of communicating these things. One can only imagine the inefficiency if these things were to be handed in as hard copy paper reports.

There is one way communication is reduced however, but in a positive way. Since the intranet is used to distribute the project files, and the fact that they are always available, there is no longer any need to email project files to team members, causing a reduction in communication.

#### 4.1.10 Lateral communication

Table 4.10 Lateral communication

Interviewee A	Interviewee B	Interviewee C
No data	Not sure, but the news feed is supposedly created by upper management in for example Stockholm, so maybe the intranet helps with lateral communication. <i>Qcmc08</i>	The intranet helps very little with lateral communication; it is restricted to the news feed. <i>Qcmc08</i>

There are studies suggesting that intranets help with lateral communication. This is doubted by the interviewees, but two of them still believe that it does, however only in the limited fashion of bringing the employees news, news which presumably is composed by the management.

## 4.2 Collaboration

Table 4.11 Collaboration

Interviewee A	Interviewee B	Interviewee C
<p>Different folders are used and are connected to a database and each folder contains a project.  <i>Qcol01</i></p> <p>Some projects are too big to do on your own or you don't have the competence for it.  <i>Qcol03</i></p> <p>Collaboration absolutely happens with people outside of the company. But it doesn't happen through the intranet very much.  <i>Qcol04</i></p>	<p>Folders are used that exist for each project, and the work is done towards these all of the time and saved against these.  <i>Qcol01</i></p> <p>If there is any problem you call the person you have to talk to.  <i>Qcol01</i></p> <p>There are often different special areas depending on the mission.  <i>Qcol03</i></p> <p>The project could be too big for one person and then we have to collaborate to get the work done.  <i>Qcol03</i></p> <p>Collaboration happens with those people that are sent abroad by the company.  <i>Qcol04</i></p>	<p>The project manager hands out the assignments to the persons in the project.  <i>Qcol01</i></p> <p>Folders are used on the intranet that all in the company can reach. All of the files for the projects are in the folders.  <i>Qcol02</i></p> <p>Most of the projects are too complicated to do on your own.  <i>Qcol03</i></p> <p>For example are the projects too big to do on your own and you don't have all of the competence on your own.  <i>Qcol03</i></p> <p>No, collaboration has recently occurred with offices that are located up country.  <i>Qcol04</i></p>

Collaboration happens when people work together (Kanter, 1994 and Anthony, 2000 in Min et al., 2005). This is something that Company Alpha does, and is manifested in the folders that they are used for the different projects. Every project has a leader and that leader is in charge of the folders and puts in a plan for the project in the folders and all of the material for the project in the folders. When using external consultant's interviewee B said that they send e-mail since external consultant's don't have access to the intranet.

Interviewee A and interviewee B said that different persons can work with the same drawing at the same time if they are working on different areas of the drawing. All of the work is then saved automatically in the projects folders for everyone to find. This shows that two or more people have an alliance which also the theory told us. Thus Company Alpha is collaborating through the intranet but not in a large extent. Information about the projects is shared in Company Alpha which is something that the theory also states. This shows that collaboration is something that occurs in the company in some way.

Interviewee C also thinks that collaboration is something that is obvious since the projects is too complex to do on their own. Collaboration is used to get the right competence in the right place, which interviewee B argues for when she says that they collaborate when there are different special areas in the project that different persons do. All of the interviewees also state that the projects often are too big to do on their own and that is why collaboration is necessary. As we can see, collaboration is important to get advantages in projects and to get them done in the best way. This could indicate on that Company Alpha is good at getting the best out of everyone in the organization. They put the resources in the right place and they get to do what they do best.

In the case of Company Alphas they only use external consultants to help them occasionally. Company Alpha has employees and offices all over the world, but collaboration internationally is not too frequent. Collaboration occurs slightly more often with offices within Sweden.

As Hansen & Nohria (2004) suggest, big companies can take advantages of coworkers no matter where they are in the world and this is something that Company Alpha do from time to time. Interviewee A argues that this kind of collaboration does not happen through the intranet and Interviewee C mean that they prefer having the people “in location”. This indicates that it is hard for Company Alpha to collaborate with their kind of work if they are in different places. It might also indicate that Company Alpha do not collaborate significantly through the intranet. Company Alpha seems to collaborate more and in different ways with the people that are close by and less with people that are in other places.

#### 4.2.1 Shared information

Table 4.12 Shared information

Interviewee A	Interviewee B	Interviewee C
It does not work like that, every part of the company has its own, and you call or you go talk to that person face to face. <i>Qcolli01</i>	Information is shared through the project folders. <i>Qcolli01</i>	Everyone can see each other’s work in the project folders. Most of the people have access to the project folders but there are some that are private. <i>Qcolli01</i>

Collaboration is about sharing information since it happens on a daily basis (Min et al., 2005) but what we can see in our interviews is that Company Alpha does share information through the intranet but not in the extent that they could.

Interviewee A says that information sharing doesn’t occur through the intranet since they rather call or meet face to face to get the information. Interviewees B and C claim that they do share information through the intranet since they have folders where they can find the ongoing work in the projects. The employees are sharing information every day through the intranet but the intranet doesn’t seem important for the employees. Since information sharing doesn’t only happen through the intranet it is hard for us to see if it occurs in several levels of the company as Min et al. (2005) states. We see that the most important information is shared with everyone through the project but information is also shared in different ways in accordance to what the theory is claiming. Interviewee B also claims that information sharing through the intranet helps



with learning from others knowledge and experiences. So the intranet can help the employees grow on a personal level and get better at their work.

#### 4.2.2 Joint planning

Table 4.13 Joint planning

Interviewee A	Interviewee B	Interviewee C
No planning happens through the intranet that is known. It is mostly the project leader that uses that kind of things. <i>Qcolli04</i>	Planning is often done in the intranet. There are special tools for it. <i>Qcolli04</i>	There is a project manager that fills in a planning tool. <i>Qcolli04</i>  Filling in the planning tolls feels like more work and unnecessary. But when you get into it and start using it, it is a big help. <i>Qcolli04</i>

Since joint planning through the intranet is dependent on information sharing (Min et al., 2005) we can draw the conclusion that some information sharing happens through the intranet because every project has its folder and in that folder all of the information about the project exists.

Interviewee A doesn't use the intranet for planning but he finds what he needs in the folders. Interviewee B and C on the other hand say that the project leader does the planning and puts it into the folder for everyone to find. Interviewee C also said that everyone else in the project is bit lax at filling in and using the folders. Joint planning starts with joint business planning (Min et al., 2005) and this is exactly what interviewee C said that Company Alpha does. Since the employees are bad at updating the project folders from time to time and don't use the intranet for anything but the project folders other employees in the same project won't get back information they ask for very quickly. This is probably the reason for them to use the telephone or to meet the participants in the project face to face. Interviewee C also says that he thinks that the planning tool means more work and that it is pretty unnecessary and this is why he doesn't use it. The planning is important for the employees but as interviewee C says, it is the project leader that do the planning and interviewee B say that it is important if you have the role to do the planning. Clearly planning is important for everyone but if you are not assigned to do the planning you don't use the tool.

### 4.2.3 Joint problem solving

Table 4.14 Joint problem solving

Interviewee A	Interviewee B	Interviewee C
There are the forums that you can use. But me personally don't use them. It feels far-fetched. <i>Qcolli08</i>	The forums can be used but they are not so well visited. <i>Qcolli08</i>	In the forum you can get help with problems. It is not very widely used. <i>Qcolli08</i>
The best thing is to find out the answer your selves or call someone who knows. <i>Qcolli08</i>		

Min et al. (2005) argues that we can see that partners have to work together to solve problems and this is something that the interviewees indicate are not the case in relation to the intranet.

All of the interviewees said that the “forum” is not much frequented and that is why he doesn't use it very much. This shows that the intranet is not widely used and that is why the employees have a hard time getting help from it. They can get help from it but they will only get the help if someone reads the questions and want to answer them. This can lead to that the employees missing out on improved ideas about solving the problem or developing new ideas as Min et al. (2005) states. As we have said before the intranet could even here be drawn back because the employees prefer face to face meetings or a phone call to get the needed help. Interviewee B suggests that it is easier to get the required help by going directly to the person that can help them instead of waiting for a reply on the intranet. This suggests that Company Alpha don't use the intranet to solve problems since it is not used by very many employees. This also limits the number of people participating in the problem solving which could mean less ideas and less contribution by others.

### 4.2.4 Joint performance measurement

Table 4.15 Joint performance measurement

Interviewee A	Interviewee B	Interviewee C
No, it doesn't happen through the intranet very much. <i>Qcolli12</i>	There is a quality plan for every project. This can be found on the intranet but we don't have anything that measures if the intranet works well only the projects. <i>Qcolli12</i>	No data

Everybody in the company have the same goal when collaborating according to interviewee A. Success with the collaboration can't be guaranteed without it being monitored and measured (Min et al., 2005). Company Alpha has some measuring tools that they use in their work but not to measure whether the collaboration is successful according to interviewee A and B.

Interviewee A mentions that they have some measuring tools for the work while interviewee A mean that they have measures to measure how the projects are going but not how the intranet is working. According to interviewee B they have measures for projects and personal growth. To measure whether the collaboration is successful is in this case a waste of time, money and recourses. Company Alpha doesn't use the intranet to collaborate in a way that is worth measure. They update drawings and similar for others to work on but they do not use it for anything else. This is why measuring it is not something that is important. The intranet is not used if it is not necessary as the interviewees have expressed.

#### 4.2.5 Leveraging resources and skills

Table 4.16 Leveraging resources and skills

Interviewee A	Interviewee B	Interviewee C
Well, there are these different departments inside the company so I guess that we are specialized and we have all sorts of specialization to realize a project. <i>Qcolli15</i>	I don't know. It is very different and depends on how much work we have. <i>Qcolli15</i>  We are a big organization so it doesn't matter what competences you need, we can take the projects anyway. <i>Qcolli15</i>	Yes, definitely. I concentrate on the parts that I know and know that someone else can do the other parts for me. <i>Qcolli15</i>

Collaboration can lead to individual business growth and this is something that we have found in both Min et al. (2005) and interviews.

Interviewee A said that the collaboration have helped the employees to find at better work environment and he feel that he has improved his work. He also feels that he has become more competent and more experienced. This shows that the employees have grown and the business have probably gotten better. Every person does what they do best and learn from others to improve in their work but as noted before them don't use the intranet very often to learn from others. Interviewee C feels that the specialization is good since he can focus on doing his job and he knows that other do theirs while interviewee B are more skeptical to call them specialized. Interviewee A likes that he doesn't has to focus on anything but his part of the projects. We can see that specialization is something that Company Alpha stands for and as the theory part states to gain the growth the company has to leverage the needed skills. This is something that interviewee A explains they do while interviewee C means that they always tries to do it in-house the company first. Interviewee A and B claimed that they put some work on external consultants. Most of the work is done in-house but if Company Alpha needs some more special competencies they take help from the outside. The interviewees have different opinions in this matter and this can indicate on that they don't work in the same part of the projects. It can also indicate on that the collaboration in this matter doesn't happens very often and is not happening through the intranet. But everyone in-house does what they do best and this does both the theory part say and the interviewees.

## 5 Conclusion

First in this conclusion we would like to iterate our research question: How do organizations use the intranet for communication and collaboration? This question has been the focus throughout our research, and we will now present our findings regarding the research question. We will start with how organizations use communication in regards to an intranet, followed by how organizations use collaboration in regards to an intranet, and finally, we will end the conclusion with a short summary.

Employees of an organization need information to be able to successfully perform their work tasks. However, our interviewees disagree as to whether or not all the information needed to perform said tasks is available on the intranet for everyone to find. Furthermore, information does not just need to exist; it must also be able to be found, something the employees at Company Alpha are having problems with. This inability to find information on the intranet leads to the employees at Company Alpha sometimes resorting to books and other mediums for their information needs.

Regarding distortion when communicating via the intranet, our interviewees were of different opinions, matching the literature on the subject, which also is of a split opinion. Distortion or no, our interviewees are in agreement that the information they can find and understand is credible, with outdated or faulty information a rarity. Also, the fact that information is stored on the intranet affords the opportunity to check back on old projects or emails, using them as evidence of sorts that the right tasks have been carried out.

We have found that the interviewees at Company Alpha does not create and upload content to the intranet, with the exception for their assigned task on certain projects, which they upload into the project folders. Neither are the employees encouraged in any way to contribute to the intranet, making it better. Two of our three interviewees do, however, occasionally use the intranet to work from home; something they say would not have been possible without the intranet. The intranet has also been found to be very effective at parlaying certain types of information, such as the newsfeed, and all of our interviewees agree that the intranet does not in any part contribute to information overload amongst them.

Most significant from our findings pertaining to communication via the intranet is the reluctance to do so. It might be that a norm has been created at Company Alpha, it might be another factor, but all of our interviewees prefer telephone calls or (if possible) face to face communication over the intranet.

It is evident that collaboration over the intranet does occur even though it is not in a large extent. Collaboration through other media is more frequently occurring and especially through telephone or face to face meetings. This sort of collaboration happens with everyone in the company and especially with colleagues in other parts of the country and other parts of the world since they

might not get into the intranet. Company Alpha have specialized competence in all of the different work tasks and this leads to collaboration in one way or another through the intranet.

Information is shared to a small extent through the intranet and to a greater extent through telephone calls or face to face meetings. Everyone in the projects get the information through the project folders. The only way of getting information is when the folders are being updated, which happens automatically when some work has been done, since it is the only way information is shared regarding collaboration. Planning through the intranet is only done by the project leader and this is because the tools for doing this are too time-consuming. Planning is important but using the intranet for it is not important for each individual.

The intranet is not used for problem solving since hardly anyone uses anything else than the project folder part of the intranet. They have a hard time getting any answer on their questions in the intranet. This results in the interviewees at Company Alpha calling or meeting whatever person who might be able to assist them. Since the intranet is in so little use for collaboration, no measurement process (in order to measure the effectiveness of the intranet) takes place. And lastly we found that by collaborating the business has grown and the company sometimes gets help from outside the company with some work tasks. With this, the main thing that we have found regarding collaboration is that the intranet changed Company Alpha's work and collaboration by helping them to save their projects in folders, thereby making them available for anyone needing them. They don't use it to collaborate in any other ways.

To sum up, there are both advantages and disadvantages to using an intranet for communication, but the interviewees at Company Alpha prefers face to face meetings or phone calls over the intranet. In addition, the intranet facilitates very little collaboration at Company Alpha, the project folders being the single point of collaboration.

## Appendices

### Appendix 1: Interview guide - Swedish

#### About the interviewee

	Qint01	<i>Berätta kort vad du gör på företaget?</i>

#### The intranet

	Qint02	<i>Berätta kort om ditt användande av intranätet?</i>

#### Communication

	Qcom01	<i>Hur viktigt är tillförlitlig och lättåtkomlig information för att du ska klara dina jobbuppgifter?</i>
	Qcom02	<i>Vad är ditt föredragna medium för kommunikation? (Ansikte mot ansikte, telefon, intranät etc.)</i>
	Qcom03	<i>Distorsion är störningar av kommunikation som gör det svårare att tolka informationen i kommunikationen. Enlig din åsikt, är distorsion mer troligt med intranätet än andra medium?</i>
	Qcom04	<i>Hur ofta blir information "pushad" till dig och hur ofta blir den av varianten "pull"?</i>
	Qcom05	<i>Anser du att du är utsatt för information overload? Vilken roll spelar intranätet i detta?</i>

#### Computer mediated communication

	Qcmc01	<i>Arbetar du hemifrån eller men personer utanför ditt geografiska område? Skulle detta vara möjligt utan intranätet?</i>
	Qcmc02	<i>Deltar du i kommunikation du skulle ignorera om det inte var för intranätet?</i>
	Qcmc03	<i>Drar du nytta av att man kan spara kommunikation som finns på intranätet?</i>

	<i>Qcmc04</i>	<i>Blir ditt deltagande i kommunikation av högre kvalitet när du har chansen att läsa på om ämnet först?</i>
	<i>Qcmc05</i>	<i>Har intranätet helt eller delvis ersatt kommunikation ansikte mot ansikte?</i>
	<i>Qcmc06</i>	<i>Är det lättare att kommunicera med en medarbetare på ditt kontor via intranätet än med någon okänd person i ett kontor långt borta?</i>
	<i>Qcmc07</i>	<i>Kommunicerar du mer (volym mässigt) pga intranätet, och är det ett bättre eller sämre sätt att kommunicera med hänsyn till effektivitet?</i>
	<i>Qcmc08</i>	<i>Hjälper intranätet till med gränsöverskridande kommunikation? Till exempel med chefen.</i>

### Communication and the intranet

	<i>Qcomi01</i>	<i>Har du skapat nya relationer eller förstärkt existerande relationer med medarbetare pga intranätet?</i>
	<i>Qcomi02</i>	<i>Finns informationen du behöver på intranätet?</i>
	<i>Qcomi03</i>	<i>Är informationen tillförlitlig och aktuell.</i>
	<i>Qcomi04</i>	<i>Lägger du regelbundet upp information angående din expertis/arbetsuppgifter på intranätet? Blir du på något sätt uppmuntrad att göra det?</i>

### Collaboration

	<i>Qcol01</i>	<i>Hur samarbetar ni i er organisation?</i>
	<i>Qcol02</i>	<i>Använder ni några verktyg som hjälp?</i>
	<i>Qcol03</i>	<i>Varför samarbetar ni inom organisationen?</i>
	<i>Qcol03</i>	<i>Sker det samarbete med någon utanför organisationen/företaget?</i>
	<i>Qcol04</i>	<i>Sker det samarbete med någon som befinner sig i en annan del av landet/världen?</i>

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## Collaboration and the intranet

		<b>Shared information</b>
	Qcolli01	<i>Delar ni information via ert intranät?</i>
	Qcolli02	<i>Hur och på vilket sätt?</i>
	Qcolli03	<i>Hjälper delningen av information med samarbete mellan parter?</i>
		<b>Joint planning</b>
	Qcolli04	<i>Använder någon intranätet för planering?</i>
	Qcolli05	<i>Hur går den planeringen till?</i>
	Qcolli06	<i>Vad hjälper planeringen er med?</i>
	Qcolli07	<i>Är planering en viktig del av ert arbete?</i>
		<b>Joint problem solving</b>
	Qcolli08	<i>Hjälper ni varandra att lösa problem via intranätet?</i>
	Qcolli09	<i>Varför / Varför inte?</i>
	Qcolli10	<i>Är alla involverade i samarbetet och problemlösningen?</i>
		<b>Joint performance measurement</b>
	Qcolli11	<i>Har de som samarbetar samma mål?</i>
	Qcolli12	<i>Använder ni olika matt för att mäta prestationen som sker över intranätet?</i>
		<b>Leveraging resources and skills</b>
	Qcolli13	<i>Har ni förväntningar på samarbetet?</i>
	Qcolli14	<i>Vad har ni fått ut av samarbetet?</i>
	Qcolli15	<i>Har samarbetet gett er möjlighet för specialisering?</i>
	Qcolli16	<i>Har organisationen slutat göra visst arbete eller har arbetet lagts på någon annan?</i>



## Appendix 2: Interview guide - English

### About the interviewee

	Qint01	<i>Tell us briefly about what you do at the company?</i>

### The intranet

	Qint02	<i>Tell us shortly about your usage of the intranet?</i>

### Communication

	Qcom01	<i>How important is accurate and easily available information for you to complete your work assignments?</i>
	Qcom02	<i>What is your preferred medium for communication? (Face to face, telephone, intranet etc)</i>
	Qcom03	<i>Distortion is interference to communication making it harder to interpret the information. In your opinion, is the intranet communication more prone to distortion than other medium?</i>
	Qcom04	<i>How often is information pushed to you and how often is it pulled?</i>
	Qcom05	<i>Do you think you are subjected to information overload? What part does the intranet play in this?</i>

### Computer mediated communication

	Qcmc01	<i>Do you work from home, or do you work with people not in your geographical area? Would this be possible without the intranet?</i>
	Qcmc02	<i>Do you part take in communication you would ignore were it not for the intranet?</i>
	Qcmc03	<i>Do you use the fact that you can save the communication over the intranet?</i>
	Qcmc04	<i>Does your communication improve when you have the chance to study the</i>

		<i>subject before responding? (Regarding non-synchronization)</i>
	<i>Qcmc05</i>	<i>Has the intranet to some degree (or fully) replaced the need for face to face communication?</i>
	<i>Qcmc06</i>	<i>Is it easier to communicate with a member at the same office with the intranet then with some unknown person at an office far away?</i>
	<i>Qcmc07</i>	<i>Do you communicate more (volume wise) with the intranet, and is it a better or worse way of communicating efficiently?</i>
	<i>Qcmc08</i>	<i>Does the intranet help with boundary spanning communication? For example with your boss.</i>

**Communication and the intranet**

	<i>Qcomi01</i>	<i>Have you formed or strengthened personal relations with co workers due to communication via the intranet?</i>
	<i>Qcomi02</i>	<i>Is the information you need available on the intranet?</i>
	<i>Qcomi03</i>	<i>Is the information accurate and up to date?</i>
	<i>Qcomi04</i>	<i>Do you post regular updates about your assignments/expertise on the intranet? Are you in any way encouraged to do so?</i>

**Collaboration**

	<i>Qcol01</i>	<i>How do you collaborate in your organization?</i>
	<i>Qcol02</i>	<i>Do you use any tools for collaboration?</i>
	<i>Qcol03</i>	<i>Why do you collaborate?</i>
	<i>Qcol03</i>	<i>Is the collaboration only in-house?</i>
	<i>Qcol04</i>	<i>Do you collaborate with someone that is in another part of the county/world?</i>

### Collaboration and the intranet

		<b>Shared information</b>
	Qcolli01	<i>Do you share information through your intranet?</i>
	Qcolli02	<i>How and for what reason?</i>
	Qcolli03	<i>Does it help with anything?</i>
		<b>Joint planning</b>
	Qcolli04	<i>Does anyone use the intranet for planning?</i>
	Qcolli05	<i>How do the planning work?</i>
	Qcolli06	<i>What does the planning help you with?</i>
	Qcolli07	<i>Is it an important part of your work?</i>
		<b>Joint problem solving</b>
	Qcolli08	<i>Do you help each other solve problems through the intranet?</i>
	Qcolli09	<i>Why / Why not?</i>
	Qcolli10	<i>Is everyone involved in the collaboration?</i>
		<b>Joint performance measurement</b>
	Qcolli11	<i>Do you have common goals to reach?</i>
	Qcolli12	<i>Do you use different measures to measure the performance that happens through the intranet?</i>
		<b>Leveraging resources and skills</b>
	Qcolli13	<i>Do you have expectations of the collaboration?</i>
	Qcolli14	<i>What have you earned from the collaboration?</i>
	Qcolli15	<i>Have collaboration made specialization possible?</i>
	Qcolli16	<i>Has the organization stopped doing some work or has the work been switched to others?</i>

## Appendix 3: Interview 1

### About the interviewee

	Qint01	<i>Berätta kort vad du gör på företaget?</i>
Sub		Jag sysslar med ventilationsdesign. Jag gör även energiberäkningar och energideklarationer och liknande. Energideklarationer är en ganska stor del av jobbet, och då är jag ute i fält så att säga. När man inte gör energideklarationer sitter jag på kontoret och jobbar med CAD för det mesta.

### The intranet

	Qint02	<i>Berätta kort om ditt användande av intranätet?</i>
Int		Det finns massor av grejer på intranätet. Det finns en liten informationssida om allt möjligt, det finns de senaste nyheterna från företaget och ett forum. Forumet använder jag inte, men nyheterna brukar jag läsa. Sen finns de olika projekten på intranätet och det använder man ju, det är bra.

### Communication

	Qcom01	<i>Hur viktigt är tillförlitlig och lättåtkomlig information för att du ska klara dina jobbuppgifter?</i>
Com		Det är ju vitalt att man har informationen man behöver för att göra sitt jobb det säger ju sig själv.
Int		Men ibland har man inte den, och då får man lägga ner projektet ett tag och jobba på något annat. Det finns alltid många projekt igång samtidigt. Det skulle vara bra om allt som man behövde fanns i intranätet, men jag tror inte att det skulle fungera, det är hundratusentals ritningar och annat som skulle behöva läggas in.
	Qcom02	<i>Vad är ditt föredragna medium för kommunikation? (Ansikte mot ansikte, telefon, intranät etc.)</i>
Com		Alltså, det förekommer väldigt lite kommunikation från mig via intranätet. Det blir att man ringer, eller om man ska skicka ritningar så gör man det via e-post.
	Qcom03	<i>Distorsion är störningar av kommunikation som gör det svårare att tolka informationen i kommunikationen. Enlig din åsikt, är distorsion mer troligt med intranätet än andra medium?</i>
Com		Informationen på intranätet är generellt stökig. Jag tror att det beror på att man har börjat med ett intranät, sedan byggt på och byggt på det gamla intranätet, därför är det svårt att hitta och få en överblick över allt som finns. Det finns en del skräckexempel till exempel den del där man gör avdrag för sin bil, det är en massa boxar och knappar och grejer överallt, jag vet inte vad man ska göra. Det är allmänt väldigt svårt att hitta den information man vill ha.

	<i>Qcom04</i>	<i>Hur ofta blir information "pushad" till dig och hur ofta blir den av varianten "pull"?</i>
	<i>Qcom05</i>	<i>Anser du att du är utsatt för information overload? Vilken roll spelar intranätet i detta?</i>

### Computer mediated communication

	<i>Qcmc01</i>	<i>Arbetar du hemifrån eller men personer utanför ditt geografiska område? Skulle detta vara möjligt utan intranätet?</i>
<i>Col</i> <i>CMC</i> <i>ICol</i>		Nej jag arbetar aldrig hemifrån, men visst arbetar man ibland med personer i till exempel Stockholm. Men detta har väldigt lite med intranätet att göra och skulle helt klart vara möjligt utan intranätet, då det sker mest med telefon och email ändå. I och för sig är den här funktionen där man kan leta upp vem som helst på företaget och hitta deras telefonnummer, foto etcetera väldigt hjälpsfull ibland.
	<i>Qcmc02</i>	<i>Deltar du i kommunikation du skulle ignorera om det inte var för intranätet?</i>
	<i>Qcmc03</i>	<i>Drar du nytta av att man kan spara kommunikation som finns på intranätet?</i>
<i>CMC</i>		Nej. Men alltså de mapparna som projektet ligger i finns ju kvar, och de gamla projekten finns ju också där.
	<i>Qcmc04</i>	<i>Blir ditt deltagande i kommunikation av högre kvalitet när du har chansen att läsa på om ämnet först?</i>
	<i>Qcmc05</i>	<i>Har intranätet helt eller delvis ersatt kommunikation ansikte mot ansikte?</i>
	<i>Qcmc06</i>	<i>Är det lättare att kommunicera med en medarbetare på ditt kontor via intranätet än med någon okänd person i ett kontor långt borta?</i>
	<i>Qcmc07</i>	<i>Kommunicerar du mer (volym mässigt) pga intranätet, och är det ett bättre eller sämre sätt att kommunicera med hänsyn till effektivitet?</i>
	<i>Qcmc08</i>	<i>Hjälper intranätet till med gränsöverskridande kommunikation? Till exempel med chefen.</i>

### Communication and the intranet

	<i>Qcomi01</i>	<i>Har du skapat nya relationer eller förstärkt existerande relationer med medarbetare pga intranätet?</i>
	<i>Qcomi02</i>	<i>Finns informationen du behöver på intranätet?</i>

	Qcomi03	<i>Är informationen tillförlitlig och aktuell.</i>
ICom Int		Ja det tror jag att den är i alla fall. Man får lita på att den är det, det måste den ju vara, det tror jag. Men intranätet är alldeles för långsamt. Det är segt. Man klickar på något så tar det ett par sekunder innan det kommer fram. Dessutom är det många funktioner man inte använder, det finns säkert jättemycket där som man aldrig har hittat, för det är så svårövergripligt.
	Qcomi04	<i>Lägger du regelbundet upp information angående din expertis/arbetsuppgifter på intranätet? Blir du på något sätt uppmuntrad att göra det?</i>
ICom ICol		Nej det har jag inte. Eller jo, en gång lade jag upp ett reklamblad. Det finns inga fördelar med att lägga upp något på intranätet, det är ej nödvändigt och inget som jag i alla fall har hört att ledningen uppmuntrar. Sen finns det dom som använder den här funktionen för att lokalisera medarbetare hela tiden, alltså man skriver i intranätet att man sitter i möte, eller att man gått hem för dagen och sådana saker.

## Collaboration

	Qcol01	<i>Hur samarbetar ni i er organisation?</i>
ICol		Vi har olika mappar på våra datorer som är kopplade mot en databas, och varje mapp innehåller då ett projekt och de olika delarna som ingår då, för min del så går jag in på CAD mappen av projekten eftersom det är det jag jobbar med. Sedan kan jag till exempel rita in rör på ritningen medans någon annan sitter någon annanstans och lägger in elen i samma dokument. Så om jag uppdaterar dokumentet så kan det vara mer saker där än när jag började. Arkitekten blir till exempel aldrig klar i tid, och vi måste hela tiden anpassa oss efter hans ändringar.
	Qcol02	<i>Använder ni några verktyg som hjälp?</i>
Col		CAD och de här mapparna.
	Qcol03	<i>Varför samarbetar ni inom organisationen?</i>
Col		Vissa projekt kanske är för stora att göra själv, eller så innefattar de mer än ventilation och då behöver man någon annan för att göra de delar man inte hinner göra själv eller inte har kompetens för.
	Qcol03	<i>Sker det samarbete med någon utanför organisationen/företaget?</i>
Col		Nej vi gör inte längre till exempel brandberäkningar. Det läggs ut på externa företag som gör det åt oss. Så det är ju ett sorts samarbete mellan oss och det externa företaget.
	Qcol04	<i>Sker det samarbete med någon som befinner sig i en annan del av landet/världen?</i>
Col		Ja absolut. Men det är inte så att man gör jättemycket via intranätet. Det sker istället mest via telefon och e-mail. Och om det är till exempel vårt kontor i Malmö så åker man hellre dit.

## Collaboration and the intranet

		<b>Shared information</b>
	Qcolli01	<i>Delar ni information via ert intranät?</i>
Col		Alltså, det fungerar inte så, varje filial har ju sitt, och då ringer man eller går och pratar med personen öga mot öga. Men det kanske beror på att jag mest arbetar med restaurering och underhåll, det går mest på rutin då. Vid nybygge kanske det är annorlunda.
	Qcolli02	<i>Hur och på vilket sätt?</i>
	Qcolli03	<i>Hjälper delningen av information med samarbete mellan parter?</i>
		<b>Joint planning</b>
	Qcolli04	<i>Använder någon intranätet för planering?</i>
Col		Nej jag vet inte, det finns inte direkt någon planering på intranätet. Det är nog mest projektledarna som använder sådant, jag får allt jag behöver veta i projektsmappar, och så gör jag vad jag ska efter att ha läst det.
	Qcolli05	<i>Hur går den planeringen till?</i>
	Qcolli06	<i>Vad hjälper planeringen er med?</i>
	Qcolli07	<i>Är planering en viktig del av ert arbete?</i>
		<b>Joint problem solving</b>
	Qcolli08	<i>Hjälper ni varandra att lösa problem via intranätet?</i>
ICol		Vi har ju de här forumen, de skulle kanske vara bra för det. Men jag personligen använder mig inte av det. Det känns aningen långsökt att jag skulle ställa en fråga och så ska någon svara på den. Det är bättre att man tar reda på vad det nu gäller själv, eller ringer någon som man vet har koll på det. Så gör jag i alla fall.
	Qcolli09	<i>Varför / Varför inte?</i>
	Qcolli10	<i>Är alla involverade i samarbetet och problemlösningen?</i>
		<b>Joint performance measurement</b>
	Qcolli11	<i>Har de som samarbetar samma mål?</i>
Col		Ja det är klart, när man jobbar på ett projekt så är målet alla jobbar mot till exempel att få klart en ritning. Så då jobbar ju alla mot det.
	Qcolli12	<i>Använder ni olika matt för att mäta prestationen som sker över intranätet?</i>
ICol		Nej, det sker ju inte så mycket över intranätet. Men för själva arbetet i sig så använder vi oss av beläggnings och debiteringsgrad.
		<b>Leveraging resources and skills</b>
	Qcolli13	<i>Har ni förväntningar på samarbetet?</i>
	Qcolli14	<i>Vad har ni fått ut av samarbetet?</i>

	Qcolli15	<i>Har samarbetet gett er möjlighet för specialisering?</i>
Col		Nja, det är klart att vi har ju olika avdelningar inom företaget så kallade skrå. Vissa sysslar ju med VVS eller el, för mig är det som sagt ventilation och energiberäkningar. Så jag antar att vi är specialiserade på så sätt, och det finns alla sorters specialisering för att vi ska kunna genomföra ett projekt.
	Qcolli16	<i>Har organisationen slutat göra visst arbete eller har arbetet lagts på någon annan?</i>
		Ja, till exempel brandberäkningarna som jag nämnde innan.



## Appendix 4: Interview 2

### About the interviewee

	Qint01	<i>Berätta kort vad du gör på företaget?</i>
Gen		Projektering för luftbehandlingssystem för ventilationssystem i CAD.

### The Intranet

	Qint02	<i>Berätta kort om ditt användande av intranätet?</i>
Int		I stora drag kan man säga att jag använder intranätet mest till att komma åt de här projektmapparna som vi har. Men jag läser även nyheterna som finns och tittar ibland in på forumet. Vi har ju alla våra projekt eller uppdrag i mappar i en given mappstruktur där man lägger allting. Så om jag jobbar med cad och ventilationssystem så går jag inte in i el eller rörritningarna. Så här finns alla dvg filer eller cad modeller. Det gör att det blir lätt att hitta projekten eftersom de har olika nr. Men det är också olika beroende på hur disciplinerat man har sparat allting. Sen finns det ju lite nyheter från ledningen och så vidare. Man kan få fram nyheter för bara vår avdelning och till exempel ett forum.
Gen		
Int		

### Communication

	Qcom01	<i>Hur viktigt är tillförlitlig och lättåtkomlig information för att du ska klara dina jobbuppgifter?</i>
	Qcom02	<i>Vad är ditt föredragna medium för kommunikation? (Ansikte mot ansikte, telefon, intranät etc.)</i>
Com Int Com		Som kommunikationsmedel är det telefon eller att man pratar öga mot öga. Eller så blir det ett email. Intranätet känns inte som en naturlig del av kommunikationen för mig. Om man vill prata generellt med en specifik person så blir det att man ringer. Man sitter också så nära varandra att man har rätt bra koll på varandra ändå.
	Qcom03	<i>Distorsion är störningar av kommunikation som gör det svårare att tolka informationen i kommunikationen. Enlig din åsikt, är distorsion mer troligt med intranätet än andra medium?</i>
ICom		Nja, alltså om man hittar den så är det väl lätt att förstå. Men det kan vara att man inte hittar den. Man vet inte var olika saker finns. Men det här med mallarna, om man gör en beskrivning på en rapport, så finns det mallar på intranät för hur detta ska se ut. Fast svårigheten är att hitta det, när man inte vet var det finns, eller om det ens finns överhuvudtaget.

	<i>Qcom04</i>	<i>Hur ofta blir information "pushad" till dig och hur ofta blir den av varianten "pull"?</i>
<i>Com</i>		Kallelse till möten, det kan vara all sorts möjlig information, nya ritningar, både internt och från andra konsulter eller projektledare. När vi ingår i ett projekt som har externa konsulter så blir det ju att man använder email där också.
	<i>Qcom05</i>	<i>Anser du att du är utsatt för information overload? Vilken roll spelar intranätet i detta?</i>
<i>ICom</i>  <i>Com</i>		Intranätet finns ju så mycket, man måste vara aktiv själv för att plocka ut det. Det finns så mycket att hämta, men det är svårt att få en överblick, det finns så mycket att man inte vet om det mesta. Det man överröses med är istället email. Men det är i och för sig så att den mesta email man tar emot är email man behöver, men ibland ser man att man bara är inkopierad i mottagarna av någon anledning. Men det är inte så farligt för mig personligen. Men i intranätet får man själv plocka, men jag känner mig inte tvungen att läsa igenom nyheterna etcetera, det får man väl sovra lite själv helt enkelt.

### Computer mediated communication

	<i>Qcmc01</i>	<i>Arbetar du hemifrån eller men personer utanför ditt geografiska område? Skulle detta vara möjligt utan intranätet?</i>
<i>CMC</i>		Ja, jag arbetar hemifrån. Intranätet underlättar väldigt i detta eftersom det går att komma åt även utifrån så att säga. Vi har även ett system så man kan fjärrstyra sin dator, eftersom CAD programmen ligger lokalt på sin dator och så måste man använda just den versionen. Och så kommer man åt de här mapparna där projekten ligger också. Man går in i ett program så kommer man åt intranätet och sin arbetsdator, fast det är begränsat vilka program man har tillgång till.
	<i>Qcmc02</i>	<i>Deltar du i kommunikation du skulle ignorera om det inte var för intranätet?</i>
<i>CMC</i>		Nej jag deltar inte men jag kanske tar del av. Som det här med forumet till exempel. Här är någon som har en fråga angående stålkärnor, inte mitt område precis, men om det är någon intressant där så läser jag det.
	<i>Qcmc03</i>	<i>Drar du nytta av att man kan spara kommunikation som finns på intranätet?</i>
<i>CMC</i>		Ja de finns i projektfilerna, och man sparar ju allt där, till exempel uppdragsspecificeringen och all e-post som tillhör projektet. Så man sparar ju allt i dessa mappar, all information är ju nästan elektronisk nu. Det kan också vara att man på Internet hittar till exempel produktblad eller liknande som man hittar och sen sparar tillsammans med ritningarna. Man sparar även alla pdf filer som tillhör etc. Sedan finns det ju gamla ritningar som är inskannade och de sparas även de i projektfilerna.

	<i>Qcmc04</i>	<i>Blir ditt deltagande i kommunikation av högre kvalitet när du har chansen att läsa på om ämnet först?</i>
	<i>Qcmc05</i>	<i>Har intranätet helt eller delvis ersatt kommunikation ansikte mot ansikte?</i>
	<i>Qcmc06</i>	<i>Är det lättare att kommunicera med en medarbetare på ditt kontor via intranätet än med någon okänd person i ett kontor långt borta?</i>
	<i>Qcmc07</i>	<i>Kommunicerar du mer (volym mässigt) pga intranätet, och är det ett bättre eller sämre sätt att kommunicera med hänsyn till effektivitet?</i>
<i>CMC</i> <i>ICol</i>  <i>CMC</i>		Alltså det är inte så mycket kommunikation över intranätet. Det blir mest email då, till exempel om man ska samarbeta med någon i Malmö. Även att de kommer åt mina cadfiler via de här projektmapparna, det är ju en slags kommunikation och det är ju effektivt att jag slipper emaila över dem varje gång jag har ändrat något. Tidsrapporteringar och bonussystem etcetera som man lämnar till ledningen är ju också väldigt effektivt att lämna via intranätet som vi gör. Sen har vi ett system som är som en sorts uppdragsuppföljning som vi lämnar.
	<i>Qcmc08</i>	<i>Hjälper intranätet till med gränsöverskridande kommunikation? Till exempel med chefen.</i>
<i>CMC</i>		Det kan det väl vara kanske. Jo, men de skriver ju ut lite nyheter om till exempel vad en hög chef i Stockholm sagt att det ska ta en viss vändning inom företaget så vet jag man ju det. Så jo, det kan det väl vara.

## Communication and the intranet

	<i>Qcomi01</i>	<i>Har du skapat nya relationer eller förstärkt existerande relationer med medarbetare pga intranätet?</i>
	<i>Qcomi02</i>	<i>Finns informationen du behöver på intranätet?</i>
	<i>Qcomi03</i>	<i>Är informationen tillförlitlig och aktuell.</i>
<i>ICol</i>		Det får man se, det är olika. Om det är daterat så är det ju lätt att se, om något är från 1992 så får man väl tänka själv. Men om det inte är daterat är det svårare, det är som ett bibliotek, allt finns, det är olika över vad som finns. Men vi har ett teknik skrå, de ska underhålla intranätet och se till så att det är aktuellt och så att det stämmer.
	<i>Qcomi04</i>	<i>Lägger du regelbundet upp information angående din expertis/arbetsuppgifter på intranätet? Blir du på något sätt uppmuntrad att göra det?</i>

ICom ICol		Jag är inte aktiv på till exempel forumet. Jag läser ibland vad andra skriver dock. Sen är det ju så att alla cadfiler jag lägger upp i de här projektmapparna kan ju alla ta del av så det är kanske ett sätt som jag lägger upp information.
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## Collaboration

	Qcol01	<i>Hur samarbetar ni i er organisation?</i>
ICol Col ICol		Vi använder de här mapparna som finns för varje projekt, sen jobbar vi hela tiden mot detta och sparar mot detta. Så man kan ta del av allas arbete genom att titta på varandras ritningar etcetera, någon gör till exempel rören och så gör någon annan elen. Då kan man titta på varandras ritningar och se om det fungerar och så vidare. Om det är något problem så ringer man upp personen som gjort det som krockar med ens egna ritningar. Man sparar allt i projektfilerna, så när intranätet ligger nere så är man rätt så handikappad. Man kan inte jobba. Men det ligger inte nere så ofta.
	Qcol02	<i>Använder ni några verktyg som hjälp?</i>
		Det är ju de här projektmapparna.
	Qcol03	<i>Varför samarbetar ni inom organisationen?</i>
Col		Det är oftast så att det finns olika specialområden beroende på hur uppdraget ser ut. Om vi ska göra både elprojekttering, VVS och ventilation, då måste vi samarbeta för att få det gjort. Vi måste samordna så att våra handlingar ser likadana ut. Eller för att uppdraget är för stort för en person och då måste man ju samarbeta för att få jobbet gjort.
	Qcol03	<i>Sker det samarbete med någon utanför organisationen/företaget?</i>
Col		Ja det kan säkert vara att man tar in olika konsulter. De har då inte tillgång till de här projektmapparna som vi pratade om. Då kommunicerar och skickar ritningar via email. Jag har inte varit med om det så mycket men de skickar filer till oss.
	Qcol04	<i>Sker det samarbete med någon som befinner sig i en annan del av landet/världen?</i>
Col		Man gör det inom företaget absolut, det finns ju det som är utskickade från företaget utomlands. Men jag har inte personligen varit med om ett samarbete där det var någon deltagare med som satt utomlands.

## Collaboration and the intranet

		<b>Shared information</b>
	Qcolli01	<i>Delar ni information via ert intranät?</i>
Icol		Ja, med de här prokettmapparna. Annars är det väl forumet om man vill det.
	Qcolli02	<i>Hur och på vilket sätt?</i>
	Qcolli03	<i>Hjälper delningen av information med samarbete mellan parter?</i>
Col		Ja man tar ju vara på varandras kunskaper och erfarenheter. Men det är också svårt, om det till exempel sitter någon uppe i Luleå så är det ju svårt att veta vad den personen har för erfarenheter eller om de har råkat ut för något liknande etc.
		<b>Joint planning</b>
	Qcolli04	<i>Använder någon intranätet för planering?</i>
ICol		Planering gör man ofta i intranätet. Det finns ett speciellt verktyg för att göra, och när det är klart så har man en uppdragsplaning för projektet som man kan följa. Då finns det för varje uppdrag som man kan ta upp och olika verktyg för olika skeden i planen. Sen finns det olika formulär man kan fylla i om kontrollplaner eller kvalitetsplaner, man fyller i möten och vilka som är med i uppdragsgruppen, så all den planeringen görs i intranätet. Här finns många verktyg som man kan klicka sig fram till vad man behöver.
	Qcolli05	<i>Hur går den planeringen till?</i>
	Qcolli06	<i>Vad hjälper planeringen er med?</i>
	Qcolli07	<i>Är planering en viktig del av ert arbete?</i>
Col		Det är säkert viktigt om man har den rollen, det har inte jag riktigt, om man är det så har man den rollen för många projekt, och arbetar inte operativt med vårt arbete, det är projektledare. Så då jobbar de mer administrativt och har mycket med fakturering och så vidare att göra.
		<b>Joint problem solving</b>
	Qcolli08	<i>Hjälper ni varandra att lösa problem via intranätet?</i>
ICol		Det skulle i så fall vara i forumet. Men det är inte så välbesökt.
	Qcolli09	<i>Varför / Varför inte?</i>
CMC		Det är lättare att ringa om man har något problem.
	Qcolli10	<i>Är alla involverade i samarbetet och problemlösningen?</i>
		<b>Joint performance measurement</b>
	Qcolli11	<i>Har de som samarbetar samma mål?</i>

	Qcolli12	<i>Använder ni olika matt för att mäta prestationen som sker over intranätet?</i>
ICol		Vi har en kvalitetsplan som vi använder för projekten, där vi fyller i olika steg som vi har gjort. Denna ligger på intranätet, men det är inget som mäter om intranätet fungerar bra, utan den mäter ju hur bra projektet går. På intranätet finns även en utvecklingsplan med frågor som man kan gå igenom som ett frågeformulär, som man själv fyller i, med ens mål, och så gör ens chef samma sak och så träffas man en gång om året. Så går man igenom de här formulären och ser hur man uppfyller de här målen, men det är ju hur man själv presterar, inte projekten och så.
		<b>Leveraging resources and skills</b>
	Qcolli13	<i>Har ni förväntningar på samarbetet?</i>
	Qcolli14	<i>Vad har ni fått ut av samarbetet?</i>
	Qcolli15	<i>Har samarbetet gett er möjlighet för specialisering?</i>
	Qcolli16	<i>Har organisationen slutat göra visst arbete eller har arbetet lagts på någon annan?</i>
Col		Kan jag inte riktigt säga, det vet jag inte. Det är väl olika och väldigt konjunkturberoende på hur mycket jobb vi har. Jag jobbar ju själv med ventilation, så jag upptar inte uppdrag med el, eftersom jag jobbar med ventilation. Vissa grejer kan man ju hjälpa till med om det är någon som behöver till exempel hjälp med någon ritningsuppdrag men generellt tar jag inte på mig uppdrag som jag inte har kompetens för, såklart. Men vi är ju en så stor organisation, så det spelar ingen roll vilka kompetenser man måste ha för att klara av projektet, vi kan ta projektet ändå, och sedan lägga ut de delar vi inte har kompetens för på någon annan del av vår organisation.

## Appendix 5: Interview 3

### About the interviewee

	Qint01	<i>Berätta kort vad du gör på företaget?</i>
Gen		Jag sitter på kontoret och designar VVS i CAD.

### The intranet

	Qint02	<i>Berätta kort om ditt användande av intranätet?</i>
Int Col		Jag använder vårt intranät dagligen. Jag läser de nyheter som har kommit, fyller i tidsrapporter, hämtar mallar till våra beskrivningar eller hämtar diverse kontrollplaner. Men det viktigaste är såklart våra mappar där alla filer för alla projekt ligger. De går man ju in på hela tiden eftersom det är de man jobbar mot så att säga.

### Communication

	Qcom01	<i>Hur viktigt är tillförlitlig och lättåtkomlig information för att du ska klara dina jobbuppgifter?</i>
Com		Det är rent ut sagt livsviktigt för projektet att man har rätt information att jobba med. Man måste veta vad som behövs och vad man ska göra, utan detta är det ju inte ens lönt att sätta sig ner och arbeta, man skulle ändå säkert behöva göra om allting.
	Qcom02	<i>Vad är ditt föredragna medium för kommunikation? (Ansikte mot ansikte, telefon, intranät etc.)</i>
Com ICom		Om det är nära till personen man söker går jag alltid dit, oberoende av vad det är för ärende. Vårt kontor är ju relativt litet, så det går att gå till personen ifråga om det är inom samma kontor så att säga. Om det är utanför kontoret så föredrar jag att ringa. Det är endast om det behövs några uppgifter, till exempel ritningar eller liknande som jag skicka email, det är ju de enda sättet som det fungerar på.
	Qcom03	<i>Distorsion är störningar av kommunikation som gör det svårare att tolka informationen i kommunikationen. Enlig din åsikt, är distorsion mer troligt med intranätet än andra medium?</i>
CMC Com		Nej jag skulle säga att det är exakt tvärt om. I till exempel ett email så har man ju kvar informationen och kan läsa instruktioner eller vad det nu kan vara flera gånger och man kan bli säker på att det är rätt. I telefonsamtal är det lätt att höra fel eller förstå fel och då har man heller ingen referens att

		återkomma till om man inte sparar telefonsamtalet eller ringer upp igen.
	<i>Qcom04</i>	<i>Hur ofta blir information "pushad" till dig och hur ofta blir den av varianten "pull"?</i>
<i>Com</i> <i>Int</i> <i>ICOM</i>		Vad och vilken sorts uppgifter man ska lösa blir pushade, resten hämtar jag själv. Regler och grundbeskrivningar och förutsättningar för projekten. Det finns allting på intranätet, men jag väljer att hämta det i böcker eller var det nu kan finnas. Det är helt enkelt lättast och snabbast. Allt finns som sagt på intranätet, men det är svårt att hitta. Sökfunktionen fungerar väldigt dåligt eller inte alls. Jag menar, även om man vet var någonting finns på intranätet så är det ändå snabbare att hitta det i en bok. Tänk då hur lång tid det tar att hitta på intranätet om man inte vet var informationen finns.
	<i>Qcom05</i>	<i>Anser du att du är utsatt för information overload? Vilken roll spelar intranätet i detta?</i>
<i>Com</i>		Jag vill ej påstå att jag utsatt för väldigt mycket information overload, det är inte så farligt. På intranätet väljer man ju själv vad man vill läsa. Till exempel läser jag ofta rubrikerna på forumet, men det är sällan jag väljer att läsa posten i sin helhet.

### Computer mediated communication

	<i>Qcmc01</i>	<i>Arbetar du hemifrån eller men personer utanför ditt geografiska område? Skulle detta vara möjligt utan intranätet?</i>
<i>CMC</i>		Jag arbetar hemifrån väldigt sällan. Men när det händer så är det en förutsättning med intranätet, eftersom det inte skulle fungera annars. Man loggar in på sin arbetsdator hemifrån via fjärrstyrning och sedan är det som om man var på kontoret, man kommer åt de olika projektmapparna etc. Så det skulle inte ha fungerat utan intranätet.
	<i>Qcmc02</i>	<i>Deltar du i kommunikation du skulle ignorera om det inte var för intranätet?</i>
<i>CMC</i>		Det finns ingen kommunikation jag skulle ignorera, men däremot skulle jag inte ha vetat om den. Till exempel forumet och nyheterna. Det har hänt att jag har skrivit på forumet och frågat om ett problem. Jag fick svar, men det fungerar sådär, det tar tid och det finns inte tillräckligt med folk på forumet. Om det var mer folk som använde det så skulle jag definitivt också börja använda det mer.
	<i>Qcmc03</i>	<i>Drar du nytta av att man kan spara kommunikation som finns på intranätet?</i>
<i>CMC</i>		Ja det är till stor nytta. Om man inte har det sparad på intranätet eller i email så har man inga bevis. Då kan man inte bevisa att man har gjort vad man skulle och att det har blivit gjort rätt. Även när någon ringer mig för att ge mig ett uppdrag etcetera så brukar jag även be om ett email, för då har man



		själv konkreta uppgifter och kan lösa dem utan att någon läggs på eller dras av.
	<i>Qcmc04</i>	<i>Blir ditt deltagande i kommunikation av högre kvalitet när du har chansen att läsa på om ämnet först?</i>
	<i>Qcmc05</i>	<i>Har intranätet helt eller delvis ersatt kommunikation ansikte mot ansikte?</i>
<i>CMC</i>		Nej jag tycker inte alls att intranätet har ersatt öga mot öga möten. Jag föredrar helt klart att prata öga mot öga med personen jag har något att samtala om. Det är lättare och mer socialt. Kanske kommer det upp andra saker också när man pratar öga mot öga än de saker man gick för att ta upp. Men det är klart att man ibland skickar ett email istället för att gå och prata med någon, men mest om man måste ge dem en ritning eller något samtidigt.
	<i>Qcmc06</i>	<i>Är det lättare att kommunicera med en medarbetare på ditt kontor via intranätet än med någon okänd person i ett kontor långt borta?</i>
<i>CMC</i>		Nej det är inte alls lättare att kommunicera via intranätet med någon som man känner. Däremot spelar det en stor roll om man ska ringa, då är det ju mycket lättare att ringa någon som man känner än att ringa till en för mig okänd person.
	<i>Qcmc07</i>	<i>Kommunicerar du mer (volym mässigt) pga intranätet, och är det ett bättre eller sämre sätt att kommunicera med hänsyn till effektivitet?</i>
<i>CMC</i>		Nej jag tror inte att jag kommunicerar mer. Fast det är nog svårt att säga, jag vet nog inte. Däremot tycker jag att intranätet är ett väldigt effektivt sätt att nå ut med kommunikation, till exempel de här nyheterna som kommer upp på intranätet, hur skulle man annars ha fått dom? Något sådant här veckoblad eller något, det är ett exempel på att intranätet är väldigt effektivt på vissa saker.
	<i>Qcmc08</i>	<i>Hjälper intranätet till med gränsöverskridande kommunikation? Till exempel med chefen.</i>
<i>CMC</i>		Väldigt lite. Inte mer än att man läser nyheterna som kanske kommer från ledningen.

### Communication and the intranet

	<i>Qcomi01</i>	<i>Har du skapat nya relationer eller förstärkt existerande relationer med medarbetare pga intranätet?</i>
<i>ICom</i>		Jag kan inte säga att jag har stärkt existerade kontakter på grund av intranätet, det kan jag inte säga att jag har. Däremot har jag skapat ett par kontakter via intranätet. Det har ibland hänt på grund av att man har skrivit något på forumet, men allra oftast så letar man efter en speciell kompetens

		på intranätet, i vår sådan här person söknings funktion. Då har man hittat någon, kontaktat personen för att få sin uppgift löst och sedan skapas en kontakt utav det.
	Qcomi02	<i>Finns informationen du behöver på intranätet?</i>
ICom		Jag vet att allt finns på vårt intranät. Men det är samma sak som jag pratade om innan, det är för svårt att hitta vad man behöver. Det borde helt klart förenklas på något sätt, så man hittar vad man behöver och inte måste leta efter det eller slå upp det i en bok istället.
	Qcomi03	<i>Är informationen tillförlitlig och aktuell.</i>
ICom		Jag skulle uppskatta att den till 95 % är uppdaterad och tillförlitlig. Det kan hända ibland att gammal information finns kvar, till exempel gamla eller icke uppdaterade grundbeskrivningar.
	Qcomi04	<i>Lägger du regelbundet upp information angående din expertis/arbetsuppgifter på intranätet? Blir du på något sätt uppmuntrad att göra det?</i>
ICom		Det har hänt att jag har lagt upp något i forumet. Någon uppmuntran att använda intranätet har jag inte fått.

## Collaboration

	Qcol01	<i>Hur samarbetar ni i er organisation?</i>
Col		Det fungerar som så att vi har en uppdragsledare. Denna delar ut uppdrag på de personer som är med i projektet, det kan vara vi som jobbar på detta kontor, men även andra kontor och externa konsulter.
	Qcol02	<i>Använder ni några verktyg som hjälp?</i>
Col CMC		Vi har det här mapparna på intranätet som vi på företaget kommer åt. Här ligger alla filer för projekten. Externa konsulter tror jag inte kommer åt dessa mappar, men då blir det till att skicka filer med email istället, och telefon kontakt har man ju alltid med alla i projektet.
	Qcol03	<i>Varför samarbetar ni inom organisationen?</i>
Col		Det är väl ganska självklart, de flesta projekt är för komplicerade för att göra själv. Till exempel är de för stora för att hinna med allt själv, dels har man inte all kompetens själv för att kunna klara av allt heller.
	Qcol03	<i>Sker det samarbete med någon utanför organisationen/företaget?</i>
Col		I projekten kan som sagt externa konsulter finnas.
	Qcol04	<i>Sker det samarbete med någon som befinner sig i en annan del av</i>

		<i>landet/världen?</i>
Col		Ja, nyligen arbetade jag med våra kontor som ligger uppåt landet. Men det är ju en fördel om man kan sitta på plats, men det kan man ju inte alltid.

### Collaboration and the intranet

		<b>Shared information</b>
	Qcolli01	<i>Delar ni information via ert intranät?</i>
Icol		Ja det blir ju att man ser varandra arbete i projektmapparna. De flesta har tillgång till alla projektmappar, men det finns vissa som är privata.
	Qcolli02	<i>Hur och på vilket sätt?</i>
	Qcolli03	<i>Hjälper delningen av information med samarbete mellan parter?</i>
		<b>Joint planning</b>
	Qcolli04	<i>Använder någon intranätet för planering?</i>
Icol		Det finns uppdragsledare som fyller i allting i ett planeringsverktyg. Varje projekt har en uppdragsledare, jag har även själv varit uppdragsledare för att par projekt. Men generellt är de som arbetar på projektet dåliga på att skriva in och använda det här verktyget. Det känns som ett mer jobb och ganska onödigt. Fast jag måste säga, att när man väl kommit in i det och börjar använda det flitigt så är det till en stor hjälp. Men får veta när uppdrag är klara, kontrollplaner, om delmoment är gjorda eller ej, när som ska vara gjorda eller varför dom inte är gjorda. Vilka moment som är gjorda eller borde vara gjorda. Det är hjälpsamt, men som sagt, det krävs att man sätter sig in i planeringen och sedan använder verktyget för att skriva vad man själv gjort, och det är lite så och så med användningen av planeringen.
	Qcolli05	<i>Hur går den planeringen till?</i>
	Qcolli06	<i>Vad hjälper planeringen er med?</i>
	Qcolli07	<i>Är planering en viktig del av ert arbete?</i>
Icol		Planeringen är viktigast men det är uppdragsledaren som gör det. För mig personligen, som jag sa, jag orkar inte riktigt använda planeringsverktyget, så jag förlitar mig nästan enbart på post it lappar. De täcker mycket av mitt kontor. Det är saker som jag måste göra som jag skriver upp på post it lappar, det är mycket snabbare och enklare än att använda planeringsverktyget, till exempel om man inte är vid en dator just när man kommer på vad man måste göra.
		<b>Joint problem solving</b>
	Qcolli08	<i>Hjälper ni varandra att lösa problem via intranätet?</i>

Icol		På forumet kan man så hjälp med problem. Det är inte så välanvänt som jag sa innan, det kommer kanske upp 5 nya ämnen om dagen.
	Qcolli09	<i>Varför / Varför inte?</i>
Icol		Forumet är inte välbesökt, annars skulle jag använda det mer.
	Qcolli10	<i>Är alla involverade i samarbetet och problemlösningen?</i>
Icol		De som läser forumet och vill svara, annars måste man ju inte.
		<b>Joint performance measurement</b>
	Qcolli11	<i>Har de som samarbetar samma mål?</i>
	Qcolli12	<i>Använder ni olika matt för att mäta prestationen som sker över intranätet?</i>
		<b>Leveraging resources and skills</b>
	Qcolli13	<i>Har ni förväntningar på samarbetet?</i>
	Qcolli14	<i>Vad har ni fått ut av samarbetet?</i>
Icol		Att samarbeta med andra inom kontoret och utifrån gör ju att man själv höjer sin kompetens. Man blir duktigare på vad man gör och får nyttiga erfarenheter. Dessutom får man ju en social samvara genom att jobba tillsammans vilket höjer hur mycket man trivs på jobb.
	Qcolli15	<i>Har samarbetet gett er möjlighet för specialisering?</i>
Col		Ja absolut. Jag kan ju koncentrera mig på de delar jag kan ännu mer om jag vet att det finns någon som kan göra de andra delarna åt mig. På så sätt kan jag jobba hela tiden inom VVS och inte bry mig om de andra delarna.
	Qcolli16	<i>Har organisationen slutat göra visst arbete eller har arbetet lagts på någon annan?</i>
Col		Vi försöker att ha allting själv inom företaget, det är lite av vår affärsmodell, det vi försöker sälja oss på. Vi gör allt. Men sedan gör vi inte allt just här på vårt kontor, men någonstans finns det någon som kan göra det.

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