

An overview of Enterprise Social Software adoption in large companies in Finland - Focus on implementation

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Objectives of the Study

Globally, the Enterprise Social phenomenon is gaining footage in organizations, transforming them more transparent, communicative and collaborative. In Finland the Enterprise Social Software (ESS) tools behind this transformation are not yet that common, and many companies are currently working on the selection and implementation of these tools. At the same time the ESS implementations in other countries have often failed due to lack of proper implementation efforts. The objectives of this study are two-fold: to form an understanding on the state of ESS in large companies in Finland, and to present a framework on how to best implement these tools within this target group. The intentions on a larger scale are to encourage companies to start the journey to Enterprise Social, and to provide tools and knowledge of ESS implementations overall.

Academic background and methodology

The academic base on the research is founded on Enterprise Social literature, which has gained popularity recently. The terminology and Enterprise Social background are covered first more broadly to form an understanding on the Enterprise Social field. The main part of the research is based on a literature review on ESS and the best practices for their implementation, synthesizing the results as a preliminary implementation framework. The empirical part consists of 18 interviews and an online survey, and is aimed at comparing the findings from the literature review against the interview insights. A revised framework is developed from the results.

Findings and conclusions

The findings of this thesis are two-fold; the state of ESS in large companies Finland and the best practices for its implementation. The ESS tools are now at implementation or recently implemented level in many large companies, but the process overall is still at the very beginning concerning the cultural change it requires. As a main derivative, the implementation framework and the necessary steps were formed, combining the results from both the empirical research and the literature review. The key success factors of ESS implementation were identified. The results regarding implementation best practices emphasize the importance of concrete management support, real business cases for the tools, and community manager's as well as product champions' efforts in the implementation process.

Keywords

Enterprise Social Software, Enterprise 2.0, Enterprise Social, implementation, end-user adoption

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ABSTRAKTI

Tutkimuksen tavoitteet

Maailmalla yritysten sosiaaliset teknologiat (Enterprise Social Software) ovat yleistyneet, muovaten organisaatioita läpinäkyvämpään, viestinnällisempään ja yhteisöllisempään suuntaan. Suomessa nämä sosiaaliset työkalut ovat vasta ottamassa jalansijaa, ja monet organisaatiot ovatkin juuri aloittamassa työkalujen jalkautuksen. Samalla kansainväliset tutkimukset osoittavat, että ehdottomasti suurin osa näistä käyttöönotoista epäonnistuu, johtuen liian vähäisestä panostuksesta jalkautukseen. Näistä syistä tämän tutkimuksen tavoitteena on tuottaa sekä yleiskuva Enterprise Social –työkalujen käyttöönotoista suurissa yrityksissä Suomessa, että erityisesti tehdä malli näiden työkalujen jalkautukseen tässä kohderyhmässä. Yleisemmällä tasolla pyrkimyksenä on kannustaa suomalaisia yrityksiä ottamaan sosiaalisia työkaluja käyttöön.

Kirjallisuuskatsaus ja metodologia

Tutkimuksen akateeminen pohja perustuu vahvasti Enterprise Social –kirjallisuudelle, joka on aivan viime vuosina yleistynyt. Terminologia ja taustat Enterprise Social –tutkimuksen ympärillä kartoitetaan kirjallisuuskatsauksella. Pääosa kirjallisuuskatsauksesta keskittyy Enterprise Social –työkalujen jalkautusmallien vertailuun, ja alustavan jalkautusmallin luomiseen. Tutkimuksen empiirinen osuus koostuu 18 haastattelusta sekä verkkokyselystä, ja se tähtää alustavan jalkautusmallin tuloksien verifiointiin. Lopullinen jalkautusmalli luodaan empiiristen tulosten pohjalta.

Tulokset ja päätelmät

Tutkimuksen tulokset valottavat Enterprise Social –työkalujen tilaa suurissa yrityksissä Suomessa, sekä parhaita käytäntöjä niiden jalkauttamiseen. Suomalaisissa yrityksissä Enterprise Social –työkalut ovat pääasiassa jalkautusprosessin alkuvaiheessa, etenkin niiden vaatimaan kulttuurimuutokseen liittyen. Tutkimuksen päätuotoksena on Enterprise Social –jalkautusmalli, joka painottaa keskeisimpiä vaiheita ja tekijöitä jalkautuksessa. Lisäksi tärkeimmät jalkautuksen onnistumisen tekijät tunnistetaan: näihin tekijöihin kuuluvat johdon ja muiden sidosryhmien konkreettinen tuki, työkalujen linkittäminen päivittäiseen työhön, sekä yhteisömanagerin että pääkäyttäjien vahva osallistuminen ja sitoutuminen jalkauttamisessa.

Avainsanat

Enterprise Social, sosiaalinen teknologia, sisäinen viestintä, intranet, jalkautusmalli, jalkautusprosessi

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1. INTRODUCTION

We are now living a major change in enterprise communication and collaboration - a similar change to what was experienced when email was brought to workplaces in the 1980's. The transformation is about Enterprise Social, or Enterprise 2.0, which means the use of social and networking tools for collaborating on the intra-organizational as well as inter-organizational level (Consoli, 2013). These tools and methods transform the interaction of workers from prevailing one-to-one communication into many-to-many, and the information and knowledge becomes accessible, transparent and searchable instead of being locked down in email folders.

The social technologies have changed rapidly and radically the way we live, and this change is now reaching the enterprise side. These tools are called Enterprise Social Software (ESS), and they facilitate the creation of web content, as well as communication and interaction with other people via e.g. microblogging and social networking sites on a corporate setting (Richter et al. 2012). The potential of ESS is tempting, as it is estimated to raise the productivity of interaction workers by 20-25% if the enterprise adopts the networking ways of working (Chui et al., 2012). However, this requires substantial change in not only the IT landscape, but in fact more in processes, practices and culture of the organization. The Enterprise Social revolution is not about technology, but change in the way of working.

As social technologies are familiar to people on the private life side, most companies that have adopted Enterprise Social have not emphasized the implementation, which has led to failures in adopting the tool (Gartner, 2013). This is mostly due to the perceived ease of use of the tools as well as non-business-criticality of the platform. It tells about the need for proper implementation regarding these tools as well as managerial understanding on the change in company culture and processes it requires.

This research will focus on the adoption of ESS inside the enterprises, analyzing the best practices of the implementation process of these tools. In order to provide a set of practices, an overview on the current Enterprise Social landscape is formed. The approach of this thesis stays

general product-wise, since the ESS adoption, as stated above, is merely about change in organizational culture and processes than a technical integration.

1.1. Motivation and goals for studying ESS implementation in Finland

"The term social software refers to web-based applications which support human interaction as well as the networking of the users" (Steinhüser et al., 2011). The meaning is still evolving regarding the enterprise setting, but basically Enterprise Social should change the way we work in all functions, with all stakeholders. The old, hierarchical way of communicating will hopefully pass, and the transparent and interactive working methods take their place. There are two major developments that have reduced the efficiency of divided, silo-based organizations: the increased power and knowledge of customers and the importance of knowledge (Gulati, 2007).

However, the majority of larger companies still have very hierarchical approaches to the flow of information, as they are divided into functions, organizations and geographical locations. The top-down approach can make it difficult to let information pass among employees and enhance collaboration overall (Tsai, 2001). Although the new ways of Enterprise Social are available, the tools are still not widely adopted. The topic caught my eye in Autumn 2013, when the Gartner report on Enterprise Social was published (Gartner, 2013), stating that there is still a long way for the maturity on the Enterprise Social field.

Already McAfee (2009) spoke out the fears of the implementation of these tools. He had noticed that concerns around Enterprise 2.0 fall into two broad categories: fears that people will not use the newly available software, and fears that they will. When conducting the preliminary interviews to iterate on the topic of the thesis, I noticed that in many Finnish companies Enterprise Social was still very feared or unknown possibility. This is why the first goal of this study is to take an overview on the field – to offer a broad outlook for these companies on the Enterprise Social, and how it is used in Finnish companies. This way I hope to enlighten the topic as well as reduce the ambiguity on the field – and to offer organizations more courage to take the step towards Enterprise Social.

Personally, I have worked with intranets and Enterprise Social solutions in many companies. I have therefore had the opportunity to see very close how the internal communication methods are implemented in different organizations. Additionally, the Gartner research revealed that as much as 90% of these Enterprise Social implementations fail (Gartner, 2013). This is the primary reason I especially wanted to focus on the implementation topic; to gather best practices and then compare them to the real life experiences from Finnish companies. My other goal is hence to develop a coherent implementation framework that can serve the companies that are starting their journey towards a more social enterprise.

1.2. Development of the research question

When considering Enterprise Social Software, or any IT solution, the bottom line of its success derives from whether it is used or not. This is why the implementation plays such an essential role in any new IT tool's launch. According to Muller et al. (2012), enterprises offer a different context for interaction at social software tools than the consumer side does, and hence the organizations cannot just assume that the tools are easily adopted even if they are alike. The reports show that Enterprise Social is very often implemented exactly like this; the tools are just taken into action with no formal implementation – and with very poor results (Gartner, 2013). The tools are seemingly easy to use, but the real adoption actually requires a lot of work and time, which comes as a surprise for many companies. This is one main motivator for this study: to present a coherent view on these tools' usage currently, and what are the best practices for their implementation.

The variables that affect the Enterprise Social adoption are various. Many studies have identified "uncertainty avoidance" or "perceived usefulness" as influential variable in predicting Web 2.0 usage (Ribière et al., 2010; Saldanha and Krishnan, 2010). The references on cultural differences affecting the Web 2.0 implementation within organizations are still limited, as there are multiple other factors, for example organization size and culture that equally affect the adoption (Von Krogh, 2012). However, there are some initial linkages between national culture and IT adoption (Hofstede, 2001). The focus of this research is on Finland as a national context, to exclude the possibilities of national culture factors affecting the research.

When it comes to the other confining factors, the focus is merely on large companies, as the probability of the ESS use increases by the size of the organization (Fuchs-Kittowaki et al., 2009). Small and large companies have quite distinct characteristics, and are fundamentally different in a number of ways (Lee and Xia, 2006; Gudanov et. al., 2010). Most researches hypothesize that large organizations adopt IT more rapidly than small organizations, and there are findings that large organizations benefit more from these tools due to network effects (Saldanha and Krishnan, 2010). A broad view of different kinds of large organizations is provided in this study in order to get a comprehensive overview on the field. Additionally, the focus of this research is on the internal adoption of Enterprise Social, not considering the ESS adoption and success with external networks, in order to provide a clear focus for the study.

Accumulating from these statements, my research has two objectives:

- 1. To provide a coherent view on the state of Enterprise Social usage in large companies in Finland
- 2. To form a concise implementation framework for Enterprise Social Software for large companies in Finland

1.3. Earlier research and the research gap

The topic Enterprise Social, or Enterprise 2.0 is relatively new, but there is already an ample research base on that topic. The term Enterprise 2.0 has seen its daylight in 2006 by its inventor Andrew McAfee (2009), and up until today it has been a very discussed topic in the business world, but also academic references are increasingly found. Enterprise 2.0 has many similar terms around it, like Collaboration 2.0, Enterprise Social, Enterprise Social Media, and so on. The lines between these terms are still quite blurry, which indicates the newness of the terminology.

Also, a few implementation frameworks relating to Enterprise 2.0 adoption have been presented in the literature (e.g. McAfee, 2009; Janes et al. 2014; Louw & Mtsweni, 2013; Nedbal et al. 2013; Baxter & Connolly, 2014; Chui et al. 2009), but they offer only general frameworks for implementation. Hence, there are no specific frameworks for large organizations, which is the focus in this study. As Van Krogh (2012) states in his comparative study, there has not been enough academic research on the adoption enablers of social software overall, and hence this study adds to this research area. Additionally, no extensive research on the adoption and implementation of Enterprise Social in Finland has been conducted. Therefore, this gap in earlier research is filled, in order to offer an overview on the segment of large companies in Finland, and their experiences on the implementation of ESS.

1.4. Methodology of the research

The research is based on three methods: literature review, interviews and a survey. The literature study forms a basis on the entire landscape of Enterprise Social and its implementation approaches, and aims at forming a preliminary framework for ESS implementation based on current findings from the field. The interviews provide a comparative view on the initial framework based on the reality of the large enterprises in Finland. The interviewees were recruited from 18 large Finnish organizations: all of the interviewed companies are in Finland's top 100 companies, and as much as one third belong to top 10. The survey, on the other hand, is targeted to confirm the interview results, and was sent to 100 large companies in Finland. These three data layers form a basis on which the results are founded: the initial implementation framework is calibrated regarding the findings of the interviews and survey, and a revised framework is developed. This framework will present a concise view on best implementation practices in the Enterprise Social field for large companies in Finland.

1.5. Structure of the research

The research starts with a literature review that discusses the Enterprise Social in general as well as ESS implementation approaches, finishing by forming an initial framework of the ESS implementation in Chapter 2. Next, the methodology of the research is outlined in Chapter 3. Thirdly, the insights of the interviews and survey are divided into two parts; the first part outlines and discusses the state of Enterprise Social in Finland in Chapter 4.1, and the second part discusses the implementation practices of the interviewed companies in Chapter 4.2, mapping the

results to the initial framework. Finally, the results are put together and discussed in the Chapter 5. The thesis is concluded by a discussion in Chapter 6, and summary and conclusions in Chapter 7.

2. LITERATURE REVIEW

This literature review provides a thorough picture on Enterprise Social and its implementation practices. First, a brief introduction of the background of the term and the different terminology around it is presented. The second part is devoted to the literature review on Enterprise Social implementation practices, which is followed by the creation of the initial implementation framework that will be used later on in this research.

2.1. Background of Enterprise Social

IT and collaborative work practices have a long history together, which is reflected also in the research literature. Collaborative information systems have been actively researched especially in the fields of Information Systems Science (ISS) and Human-Computer Interaction (HCI or CHI). The researchers in ISS have studied computer-mediated collaboration under the topic names Group (Decision) Support Systems G(D)SS or Electronic Meeting Systems (EMS) already from the mid 1980's. According to de Vreede et al. (2014) this GSS research area has the largest body of publications in the collaboration area, especially during the late 1980's to the late 1990's (see also Bragge et al. 2007 for a bibliometric review of 2.000 articles on G(D)SS and EMS research). HCI researchers have studied the topic under the term Computer-Supported Collaborative Work (CSCW), and the first CSCW workshop was held already in 1984 (Schmidt and Bannon, 2013). A vast array of different GSS and CSCW solutions has since been developed by software vendors over the years to make collaborative work better (McAfee, 2009).

According to McAfee (2009), for CSCW there were two main applications in the 1980's and 1990's: groupware and knowledge management (KM). Groupware was aimed for employees to work better together, giving them access to shared information and communication tools - an example of this was the Lotus Notes tool. Organizations used these tools mainly for messaging and calendar functions, but found that these software were less prominent with finding and sharing information. Knowledge management, on the other hand, meant databases, where the human knowledge, expertise and insights were to be collected.

From the early 21st century onwards the rapid growth of the Internet and ICT sector marked many changes in the tools that enabled Collaboration 1.0. The web tools became Web 2.0, collaboration became Collaboration 2.0 and the term Enterprise Social, or Enterprise 2.0 was invented (Turban et al. 2011; McAfee, 2009). Today, times have changed dramatically from the CSCW and GSS applications, as nowadays ICT has become the glue that ties employees, tasks, organizations and countries together. It has become the foundation of all sectors and economies, since it channels knowledge, reduces transaction costs, and provides easy access and connectivity, among numerous other benefits (Kramer et al., 2007). Knowledge management is equally changing rapidly: from centrally managed, structured and controlled access to knowledge, today the knowledge management is conducted incrementally via social software. These new cloud-based solutions are effective, less costly and mobile, and they support group interaction towards communities and content creation (Von Krogh, 2012).

Social software is today perceived to fundamentally disrupt the way employees handle knowledge (Bebensee et al., 2011). According to Leftheriotis and Chiannakos (2014) there is evidence that not only the Enterprise Social disrupts the old ways of working, but also significantly and positively impacts the employee performance. Bebensee et al. (2011) state that the social tools in question are founded on three layers. At first, the tools are founded on social principles and collaboration. Secondly, the tools consist of many applications, like wikis, blogs, social bookmarking, and other intuitive easy-to-use services. Thirdly, their infrastructure is based on open platforms and services that can bring economies of scale. (Ibid.).

Despite the potential of all these new features and applications, the social software adoption is still today quite far from the ideal of effective collaborative work, where people both create and share information as a community. Although the tools and terminology have evolved from the CSCW times to Enterprise 2.0 (McAfee, 2009), people are still very much stuck on producing information on one-to-one or one-to-many tools, like email and instant messaging (Chui et al. 2012). The Enterprise Social literature (e.g. Bebensee et al., 2011; McAfee, 2009; Richter et al., 2012; Leonardi et al., 2013) concludes that these tools offer a new way for collaborative work that will change the way people interact and share knowledge. However, their adoption is still in its early phase in many organizations.

2.2. Terminology analysis around Enterprise Social

The terminology around Enterprise Social is very rich, as the subject is vast and quite new. When starting to research the topic, many similar terms emerged that described the Enterprise 2.0, its deliverables, or some part of it. In order to fully understand which term is related to which content, the most common terms and their main differences will be explained in this section. The discussion and comparison will be held around three issues: the explication of the term, its targets, and target area (internal and/or external in the organizational scene).

In the following the different terms that are most relevant and closest to the them of this thesis are characterized: Knowledge management, Web 2.0, Enterprise 2.0, Collaboration 2.0, Corporate/Enterprise Social Software and Enterprise Social Media.

2.2.1. Knowledge management

Knowledge work is a fairly new area of research (Sari, 2008), but knowledge management is a relatively old term, compared to the other ones around the area of knowledge sharing and collaboration inside organizations. Knowledge management (KM) has already been used and researched in the late 1980's (McAfee, 2009), but the term is still relevant for today's organizations. KM covers information, communication, human relations, intellectual capital, brands and the like (Quintas et al., 2007). It involves creating and mobilizing certain knowledge for different purposes; not everything that is known needs to be managed. However, the "right" knowledge has been an increasingly important part that organizations have been compelled to take into consideration already few decades ago. (Ibid.).

Richter et al. (2012) have summarized the current goals for knowledge management. The goals that were found relevant in almost all studies they reviewed were the creation of knowledge repositories, the facilitation of access to knowledge and knowledge sharing, and the articulation of knowledge as a vital resource for companies (ibid.). Overall, knowledge management focuses on the internal knowledge capacities of organizations. It has experienced a shift from the early techno-centric knowledge management focusing on capturing and categorizing of knowledge into "KM 2.0" or "Social KM" that is more people- and sharing-centric (Janes et al., 2014).

2.2.2. Web 2.0

The Internet has changed dramatically during its existence, and the major change is that it has become a place to collaborate and contribute rather than being an information repository. This is the foundation of the term Web 2.0; the change that drives socialization, openness and collaboration in the Web platform (Stankovíc and Jovanovíc, 2010). Generally Web 2.0 is described as collaborative, participatory, interactive and engaging (Ribière et al., 2010).

The nature of Web 2.0 is hence not specifically tied to organizational use, but the term is still much used defining the new, collaborative internal communication tools also in the organizational scheme (Ribière et al., 2010). Like Baxter and Connolly (2014) state:

"Organizations are also employing the use of Web 2.0 technologies for the purposes of internal communication and knowledge sharing among their workforce."

Baxter and Connolly (ibid.) have identified the most prevalent Web 2.0 tools used inside organizations: wikis, blogs and social networking sites. These tools are just a few among many Web 2.0 tools that have been implemented also for internal purposes. The main target for these tools is however similar to the outcomes in the public web sites; they facilitate knowledge sharing, collaboration and creation of content (Janes et al., 2014). To sum it up, Cook (2008) has defined a coherent set of four subspaces for Web 2.0 platforms: communication, collaboration, cooperation and connection.

2.2.3. Enterprise 2.0

Enterprise 2.0 goes more in depth into the social collaboration tools and knowledge sharing between employees in an organizational context, with the help of specific applications. It cannot be discussed without citing the term's inventor, Andrew McAfee. He explained in his book (McAfee, 2009) that Enterprise 2.0 is *"the use of emergent social software platforms by organizations in pursuit of their goals"*. Later, Gardner (2013) specified Enterprise 2.0 as social content creation tools, social information management tools and social networking and search tools.

McAfee (2009) lists six targets that are specific to Enterprise 2.0 and difficult to achieve without it:

- 1. Group editing
- 2. Authoring
- 3. Broadcast search
- 4. Network formation and maintenance
- 5. Collective intelligence
- 6. Self-organization

Consoli (2013) characterizes an Enterprise 2.0 also as a new advanced company that works with all relevant stakeholders (from the supply chain to employees and customers) using social networks and web 2.0 tools. Hence, the Enterprise 2.0 does not refer only to internal work, but also to the work with different stakeholders outside the company borders.

2.2.4. Collaboration 2.0

Collaboration refers to a process whereby two or more individuals, groups or enterprises work together to achieve a common goal (Briggs et al., 2003). Turban et al. (2011) coin the traditional GSS and CSCW tools as Collaboration 1.0 tools, and state that in the Enterprise 2.0 context:

Collaboration 2.0 supplements and expends the capabilities of the traditional Collaboration 1.0 tools by providing an inexpensive, flexible and user controlled computing environment and social software, that allows for innovative collaboration activities, such as mass collaboration.

More specifically, Turban et al. (ibid.) state that the unique characteristics that differentiate Collaboration 2.0 from 1.0 are the characteristics of Web 2.0, such as tagging, wikis, blogs, project groups, polls, chats and online social networks. Actually, they mention that Collaboration 2.0 is also referred to as Social Software.

2.2.5. Enterprise/Corporate Social Software

In the literature review, there are two terms that will be referred as ESS in this research: Enterprise Social Software and Corporate Social Software. ESS tools facilitate the creation of web content (e.g. blogs or wikis), as well as communication and interaction with other people via e.g. microblogging and social networking sites on a corporate setting (Richter et al. 2012). When it comes to the targets, Richter et al. (ibid.) explored the goals for ESS implementation in 23 case companies. Out of these, six main goals were identified:

- 1. Efficient, goal-oriented employee communication and avoidance of information overload
- 2. Efficient knowledge transfer
- 3. The establishment of networks of experts
- 4. Participation of employees and creation of open corporate culture
- 5. Increased awareness and transparency
- 6. Support for the innovation potential and secure the future viability of the enterprise.

Hence Enterprise Social Software, focuses largely on the internal communication and exchange inside the company, although communication with customers and partners is also seen increasingly important, for instance when using crowdsourcing for innovating new products and services. As Richter et al. (2012) described, there are many different features in the ESS, since there needs to be communication, transparency and innovation features available, among others. Muller et al. (2012) summed up the research base on Enterprise Social Software to consider features to be mainly blogs, microblogging, wikis, shared bookmarks, shared files and social networking sites. These comprise already a vast amount of social tools.

2.2.6. Enterprise Social Media

Enterprise Social Media is a very close term to Enterprise Social Software. Leonardi et al. (2013) describe the Enterprise Social Media (ESM) term as follows:

Web-based platforms that allow workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited and sorted by anyone else in the organization at any time of their choosing. Enterprise Social Media is especially targeted for coworkers' cooperation, like ESS. The first three targets listed by Leonardi et al. (ibid.) are not that special for an organization, but the transparency and availability of these actions for anyone to view in the future makes Enterprise Social Media different from other communication tools.

2.2.7. Conclusion on the terminology and focus of this research

As can be inferred from the previous, there is overlap in the terms around Enterprise Social. The terms based on the literature review are summed up as follows:

Knowledge management is an umbrella term around knowledge workers' information processes, which has now developed as Knowledge management 2.0: towards a people- and sharing-centric view rather than a data repository view. Enterprise 2.0 denotes knowledge sharing and collaboration within but also outside an organization (e.g. with customers), with Web 2.0 tools and platforms, and the platforms to drive this change can be called Enterprise Social Software or Enterprise Social Media. Collaboration 2.0 is focusing on the collaboration part of Enterprise 2.0.

Based on the brief literature analysis it can hence be framed that the present research is about Enterprise Social Software usage and implementation inside the companies. In this research, the focus is on the internal Enterprise Social instead of both internal and external, in order to provide a clear focus for the research. When it comes to the terminology, we can and should include also the reference literature that discuss Enterprise Social Media, Enterprise 2.0 tools, Web 2.0 tools within an organizational context or Collaboration 2.0 tools.

2.3. Enterprise Social Software applications

Enterprise Social Software thus denote a large area of functionalities and applications that is in constant change and transformation due to the novelty of the whole industry. Consumer Web 2.0 applications are typically driving the development with constantly emerging new features, and hence, many ESS's have functionalities that are primarily familiar from the consumer applications. Next, the most common ESS tools and functionalities are scrutinized.

2.3.1. Most Commonly Used Enterprise Social Software

According to Drakos et al. (2013) the ESS tools are used primarily to support people working together in teams, communities and networks; they are typically not specialized in a specific function, but offer a wide range of collaborative tools. These tools are mainly used inside organizations, but they can also be deployed for collaboration between suppliers, customers and partners.

In general, according to the Gartner's research (Drakos et al. 2013), the ESS products that compete in this market help users to:

- Find out about each other personally or professionally
- Mine their networks of contacts and acquaintances for advice, references and referrals
- Form teams, communities or informal groups, and invite external participants from other organizations
- Work together on the same work objects
- Discuss and comment on their work
- Organize work from their perspective
- *Identify relevant work*
- Discover other people with common interests
- Alert users to information or events that might be relevant to them
- Learn from others' expertise

Drakos et al. (ibid.) position the current offerings into a "magic quadrant" by two dimensions: ability to execute and completeness of vision (Figure 1). The tools that are in the leader segment of the table, Microsoft, IBM, Jive Software and salesforce.com, will be briefly discussed.



Figure 1: Magic Quadrant of Social Software in the Workplace (Source: Drakos et al., 2013)

IBM's ESS tool Connections was the pioneer in this industry, targeting specifically the social software market. Microsoft has two leading products: SharePoint and Yammer. Out of these Yammer is focused on Enterprise Social, whereas SharePoint mainly to document management. However, they are still overlapping with features, although their roadmap is to become more integrated. Jive software attracted the early adopters of the market due to its broad product capabilities. Salesforce Chatter has been derived from a CRM tool, and hence it provides very

good activities for sales and customer support employees, and is becoming a more general ESS tool. (Drakos et al., 2013)

2.3.2. Enterprise Social Software functionalities

There are many applications and functions that fall under the term Enterprise Social Software, and new features emerge rapidly. The basic functions, however, are quite the same for different software – these are the functions that are familiar to us from the consumer-side services, like Facebook or Twitter. Table 1 enlists the most common features of ESS.

Table 1: Most common Enterprise Social Software features

Wiki	A wiki promotes the collaborative usage and creation of content (Stephens, 2009). Wiki is a site, where the content can be edited, added or removed by anyone accessing the page, at any time (Sari et al. 2008).
Blog	A blog (or web log) is series of blog posts associated with a group (Janes et al. 2014). A project blog is kind of a log file informing the specific team members of the status, decisions and events related to the specific project or subject (Sari et al. 2008).
Microblog	Microblogs are short posts / update messages (Riemer & Richter, 2010).
Newsfeed	Newsfeed is an RSS feed from multiple sources gathering the information to one place (Gardner, 2012).
Workspace	A workspace is a common space for a group of users to generate content and make it available for consumption (Gardner, 2012).
Tag	Tagging refers to the assignment of keywords, or meta-data, to resources. (Durao and Dolog, 2012). It is helpful e.g. in enterprise content management

	and search.
Comment	Commenting refers to a comment on a page (wiki) or a post by an individual (Janes et al., 2014).
Follow	Following in ESS enables keeping track of individuals in your network in order to dynamically see their activities (Janes et al., 2014).
Online social network	Online social network is an umbrella term for a site, where the members (employees) can store their personal information in the form of a profile and link to their connections, as well as see others' connections (Sari et al., 2008; Boyd and Ellison, 2007).

2.4. Initial framework for the implementation of Enterprise Social Software

The recent survey by Gartner (2013) showed that 90% of the Enterprise Social implementations fail, and the main reason is that there are no proper implementation efforts. The initiatives follow the practice of "provide and pray", where the platform is just enabled technically, but there is no target-oriented implementation work behind it (ibid.). The reason for this can be debated on, but some major factors are that the collaboration tools are not perceived as business-critical and they are seemingly easy to use, hence heavy implementation and training are seen unnecessary. This chapter aims to build the initial implementation framework that will serve as a base for the empirical research.

2.4.1. Main Implementation approaches

The literature presents diverse approaches for implementing ESS tools. The most common pair of approaches is the "bottom-up" vs. "top-down" tactics (Louw & Mtsweni, 2013). The other common pair is "participative" vs. "promotive". The first approach, top-down vs. bottom-up,

signifies the division of managerially pushing the adoption versus the employees' own adoption. As can be found the Gartner research (2013), the bottom-up approach is definitely the most used in companies, but the most failed one as well. It is commonly stated that the best approach comes when bottom-up and top-down are combined, i.e. the management supports well the bottom-up activities (Richter et al., 2012, Louw & Mtsweni, 2013).

The choice of exploration and promotion becomes available when a company has decided on a supportive, more reactive way of implementation (Richter et al., 2012). In this context "exploration" means that the potential use is not fully known, and the tool is more adaptively learned during use, whereas the "promotion" approach means that the potential is known, besides which there is also a clear objective, use cases and target group for the tool. In Richter et al.'s research (2012), where they analyzed 21 case studies, there was a slight majority using both approaches: during an initial stage the companies would explore the tool's possibilities, followed by the promotion stage where the use case is clearly communicated to the main target group.

2.4.2. Forming the implementation steps

In order to start creating a framework for Enterprise Social Software implementation, a literature review was first conducted from the current Enterprise Social implementation literature. The formation of the preliminary implementation framework began by gathering the essential detailed steps according to the reference articles. There are numerous diverse implementation frameworks, like Andrew McAfee's (2009) six steps for the implementation process or Louw & Mtsweni's (2013) ten-staged implementation approach.

Seven implementation frameworks that were specified to ESS implementation were found and are referred to in Table 2: Baxter & Connolly (2014); McAfee (2009); Louw & Mtsweni (2013); Nedbal et al. (2013); Turban et al. (2011); Chui et al. (2009); Janes et al. (2014). The purpose is to first form an initial action step framework in order to see the most common activities, and at the end form a preliminary framework for the implementation of Enterprise Social Software.

Table 2: The initial action steps for ESS implementation according to the reference literature

Stage/action	1)	2)	3)	4)	5)	6)	7)
PLAN		-					
Determine vision	X	x	X	X			
Determine objectives (desired goals)	X	x	x	X			
Identify requirements	X			X	X		x
Ensure strategic alignment			x			X	x
Carry out organizational analysis	X			X	X		x
Enterprise 2.0 technology selection and fit assessment	X		x		X		x
Assess compatibility issues with legacy systems	X						
Define the project	X			X			
DESIGN							
Involve important stakeholders	Х		X	X		X	x
Define roles & responsibilities			x				
Conduct meetings/workshops	X			X			x
Formulate governance framework	X		x				
Formulate a communication plan			X				X
Formulate an implementation plan			x		X		x
Ensure alignment to daily work		x				X	
Conduct a pilot group	X			X			
Assign a product champion/champions	Х				X	X	X
Define performance measures					X		
IMPLEMENT							
Communicate goals	Х	x		X			
Train users		x		X			
Identify quick wins/success stories	X		X	X		X	
Show appreciation to ESS	X	x		X		X	
Introduce incentives		X					
Gather feedback from staff	X						X
Measure success	X	X			X		

1) Baxter & Connolly, 2014

2) McAfee (2009)

3) Louw & Mtsweni (2013)

5) Turban et al. (2011)6) Chui et al. (2009)7) Janes et al. (2014)

4) Nedbal et al. (2013)

The fine-tuning of the action step framework was conducted in the following way. First, all the implementation steps from the selected frameworks were listed. Secondly, the different actions listed were compared, and similar ones were combined. Thirdly, all the actions were divided into

three phases: Plan, Design and Implement, which indicate broadly when a specific action should be taken. The results, summarizing the phases and steps, but also the popularity of the action steps within the target literature, are collected in Table 2. The actions are not listed in any specific order within the phases.

In the following, the results of the implementation framework will be discussed by three implementation phases: Plan, Design and Implement. This is done in order to see more coherently the approximate order in which the activities were presented in the reference articles.

Plan

All good journeys start with a plan where one wants to go. The same goes with Enterprise Social journeys. Before investing in ESS, the organization must have some kind of idea what is the vision – a strategic direction and strategic objectives – of the implemented solution (Louw & Mtsweni, 2013). In the implementation framework (Table 2) both actions - determine vision and determine objectives - are among the first activities for the ESS implementation. As Andrew McAfee (2009) already put it:

"The first step in any Enterprise 2.0 efforts should be the formation of a consensus about its goals"

Once the vision, goals and objectives are clear, the objectives need to be translated into business drivers, and move away from the more strategic and general level (Baxter & Connolly, 2014). The formation of expected outcomes and possible benefits (scope and use of ESS) includes also risk and requirements assessment on a concrete level. The consideration of the goals with respect to the culture of the enterprise is an important issue. If the culture is open and sharing-oriented, teams can more easily start collaborating with the new platform. However, if teams are not willing to share their insights or do not trust their colleagues, then the management needs to consider ways to transform the entire culture (Janes et al., 2014). Organizational requirements are hence important to assess already at the beginning (Turban et al., 2011).

When the requirements are clear, the needs of the organization can be stated in a coherent manner, and hence the comparison of different solutions becomes possible. This should be

conducted alongside a technology fit assessment. This means understanding the current state of the organization when it comes to the internal and external collaboration as well as possible benefits and barriers of the implementation. An organization's ability to adopt Enterprise Social Software depends on many issues: the culture as well as the size of the organization, and the current state of software are important factors. (Baxter & Connolly, 2014)

The needs have to match with the possible tool, but obviously there are always trade-offs that need to be made, for example between costs and functionalities. This is a difficult part, as the cost of the tool is not only its acquisition cost, but also other "total cost of ownership" factors like employee training, software maintenance and suitability with the current software landscape need to be taken into consideration (Turban et al., 2011). The technology selection derives from the understanding of the different characteristics of the tools and the behaviors they encourage (Janes et al., 2014).

Finally, when the vision and objectives are set, the assessments have been conducted, and the decision on the ESS tool has been made, the ESS implementation as a process will start. The first steps of this change are defining the project, which includes putting together all the previous steps, but also planning the future, forming a team and for example assigning a budget for it.

Design

The most common action step in the Design phase is "Involve important stakeholders". A crucial factor is to achieve top-management support and commitment to the Enterprise Social (Louw & Mtsweti, 2013). Janes et al. (2014) found clear evidence that when the top management is involved in the ESS deployment and supporting it, the tools are more widely adopted. The authors recommend that the decision-making authority should consist of the top management, content management, process management and information technology support.

One important stakeholder group is the project group itself, and the roles and responsibilities within the group must be defined carefully. The primary owner of the project is one important factor that needs to be taken into consideration: if the project is driven by collaboration and communication needs, it should not be owned by the IT department (Janes et al., 2014). The optimal solution is to work in cooperation with IT, but to still have a clear ownership structure and responsibilities between different parties.

Nedbal et al. (2013) note that a stakeholder analysis is a vital part of the implementation in order to identify possible promoters and opponents of ESS. It is important to understand these people's influence potential, but also to get a deep understanding of the reasons; in case there are major difficulties that will come up with the implementation, they need to be known so that the implementation team has a chance to act proactively to tackle them. Nedbal et al. (ibid.) suggest a basic questionnaire as a solution, but also employee interviews and workshops are possible in case more in-depth information is wanted from the field. One example is to use process cards to define internal processes and based on these develop concepts where ESS based tools become part of these processes (ibid.).

Next in the ESS implementation framework follows the building of the governance framework. A governance plan or framework can mean many different things to different organizations. The definition by Louw and Mtsweti (2013) provides a good overview of different governance methods. The governance plan should be as follows:

- Aligned towards the strategic objectives
- · Include roles, responsibilities and accountability
- Include clear decision-making authority process
- Include policies, procedures and principles guiding the use of ESS tools.

One important factor Louw and Mtsweti (ibid.) also indicated was that these goals need to be communicated in an efficient way – it is not enough that they exist, there needs to be awareness around these topics. This is directly related to the next action items in the implementation framework: "formulate a communication plan" and "formulate an implementation plan".

Communication and implementation plans go hand-in-hand. End-user awareness and support structures are essential when the ESS launch is going live. Defining the implementation plan, which includes the different parts of this framework, like identifying champions or planning

trainings, is an essential part that evolves along the process all the time (Turban et al., 2011). Enterprise Social Software adoption strategy should have a formal communication plan, and it needs to include the following elements: frequency of communication, type of content linked to the target audience, ESS tool's capabilities and an answer to "what's in it for me" (Louw & Mtsweni, 2013).

Although the action "ensure alignment to daily work" was not explicitly cited in many of the reference articles, it was discussed as one of the cornerstones of the success of the implementation. Studies point out that the perceived usefulness is the single most important factor that affects the intentions of adopting the tool (Wang et al., 2013; Chui et al., 2009). Louw and Mtsweni (2013) even suggest that the Key Performance Indicators (KPIs) regarding the employees should be aligned with the participation in the platform. Overall, already McAfee (2009) found that the results of implementation differed a lot between the systems that were integrated as part of the employee's daily work, and the ones that were not.

The next step in the thorough planning is to conduct a pilot. A pilot group is very often a good choice to collect feedback and detect possible barriers and problems for the real launch (Baxter & Connolly, 2014). Nedbal et al. (2013) discuss the same subject with different terms, as they suggest to have a "beta release", and have the pilot users trained in a quite early phase before the complete implementation. They also highlight the importance of feedback collection and usability testing at this phase, which lead to a better overall launch.

The deployment of ESS means in most organizations a change in the level of corporate culture, not only a change in the IT toolset. This is why the implementation in especially large organizations needs champions, taking the message to the ground level, acting as role models, and answering to all kinds of questions (Baxter & Connolly, 2014). The champions can be found during the piloting phase or they can be already part of some other key user network. It is important that these key users are committed to the job, and that it is also clear to the organization who can be of help if needed.

Measuring is an important part in corporate decision making and the follow-up of results. Return On Investment (ROI) is one common instrument to measure the economic benefit of the investment. However, the value of ESS is very difficult to measure only in economic terms due to the intangible benefits involved. Muller et al. (2009) propose a new approach to this subject: Return On Contribution (ROC). They describe this metric as a ratio, where benefits are divided by costs – but the units of this metric are people. In other words, ROC is the ratio of the number of people benefiting of the system and people that contribute to that resource. These, and other performance measures should be set before the actual launch, so that the adoption rates can be followed.

Implement

The actual implementation is a process, not a project. This means that currently most of the Enterprise Social Software adoptions represent a cultural change, and not only a short-term tool upgrade, since Enterprise Social is a relatively new wave in the organizations. Since the focus is on the process view and not on any specific technology, the actual technical implementation is excluded from the discussion. It is however considered as a prerequisite of the implementation activities discussed in the Implement phase.

Approach-wise, a common suggestion is to use both bottom-up and top-down implementations, which means that top management support and promotion are in place, but also early adopters and product champions supporting the adoption at the employee level (Janes et al., 2014). Many actions that need to be taken care of are listed in Table 2. It is important not to consider them as one-time activities, but as processes that live alongside the organization's cultural change.

The first task in implementation, "communicate goals", is a very important one. If the users do not see the benefits for themselves, it is highly likely that the implementation will fail (Chui et al. 2009). Regarding the potential for communication failure, McAfee (2009) lists three basic implementation tasks that all need to be taken care of: explaining users the goals of the efforts; training them to use the tools; and continually encourage them to contribute to the system (ibid.). McAfee further underlines that many companies underestimate the first and last part of the communication, and only focus on the training. This can have very negative effects companywide, as users are able to use the tools but they do not really understand its purpose in the business.

Although training is not enough as a standalone task, a clear training and support structure is nevertheless needed. The training should include both online studying options as well as workshop training sessions that allow spontaneous questions and answers relating to issues that might not be covered in the training materials (Louw & Mtsweni, 2013). There is also a clear need to train the admintrator(s) and other key users on top of the basic training (Nedbal et al., 2013).

When it comes to introducing incentives, this possibility is a good way to drive users into the platform, although it is not very much cited in the reference literature. An additional part to this is to demonstrate that contributions are valued. The most straightforward way for the official leaders is to simply use these tools themselves: contribute, ask, and bring up content in different occasions (McAfee, 2009). This is also related to the identification of quick wins and showing appreciation to ESS, which was often mentioned in the reference literature. Louw and Mtsweni (2013) suggest that a couple of quick wins should be introduced already during the launch, especially the kind that address some enterprise-related problems, which can be solved by the new platform with little effort.

Feedback is an essential part of the deployment, as ESS implementation is not a simple project but a process that takes some time. Hence the feedback channels need to be considered carefully, Nedbal et al. (2013) suggest an implementation blog that can be used interactively. This also strengthens the reputation of the platform and fosters participation, which can have a very positive impact on the employees. It is also important to remember the role of the champions in listening, gathering and answering to the comments that come up in multiple arenas (Baxter & Connolly, 2014).

The measurement is one important factor of the deployment, but a tricky one as well. McAfee (2009) does not suggest to use quantitative ROI analyses, since intangible assets, such as knowledge, seldom have direct impact on financial outcomes – they affect financial outcomes mostly through a long chain of events that is hard to determine. Also Richter et al. (2013) state that there is a lack of applicable approaches to measure the success of Enterprise Social initiatives. However, quantitative data on the progress, usage, and content are possible to

measure. Turban et al. (2011) suggest a few measures to be determined before the deployment, and then during the implementation to be followed gradually.

2.4.3. Forming the preliminary implementation framework

All the action steps that were discussed in Table 2 are useful and good tools for any organization that wants to have a solid implementation plan. However, a framework needs to be concise and straightforward so that it provides a stable model how to proceed with the ESS implementations. In order to accomplish this, some of the action steps were combined and some renamed. The components were selected on the basis of importance – the ones that had most mentions and emphasis in the reference articles were weighed more. The preliminary framework for the ESS implementation was formed as follows.

1. Determine the targets

Envisage what you want to achieve – the initial vision as well as the objectives for the implementation.

2. Assess your organization and the possible tool

Compare different Enterprise Social options with respect to the company's IT structure and culture requirements.

3. Involve important stakeholders and product champions

Bring management and other important actors to the process. Assign a product champion.

4. Iterate the full implementation plan through workshops

Form a communication and governance plan while planning the implementation.

5. Conduct pilot groups

Choose pilot groups with good a business case or future importance in implementation.

6. Inform and train employees

While implementing technically the solution, communicate the goals, success stories and show support for ESS.

7. Measure success

Plan the measurement and measure the success of the platform.

This preliminary framework will next be juxtaposed with empirical data, after which it will be refined to the final implementation framework.

3. METHODOLOGY

The empirical part of this research is aiming at getting a thorough picture of the ESS implementation and usage in large companies in Finland, and hence a multi-method approach for data collection was selected. First, a validation of the topic by 25 short and 2 pilot interviews, and then 16 full-length interviews for the actual data collection were conducted. After the interviews were finished, a questionnaire was sent out to the largest companies in Finland in order to get support for the interview results. The empirical part will have two deliverables: Firstly, a comprehensive picture on the Enterprise Social field in large companies in Finland is provided. Secondly, the theoretical and preliminary ESS implementation framework built in the previous section will be juxtaposed with the empirical results. As an outcome, a revised implementation framework will be formed.

3.1. The pre-interviews

Initially, the aim of this thesis was to take a closer look on the measurement models and methods of ESS. Two separate validation processes were conducted in order to validate the topic:

- 1. Twenty-five short, semi-structured interviews about ESS at the Aalto Arena fair (career fair)
- 2. Two long, semi-structured interviews with company representatives that have implemented ESS.

3.1.1. Short interviews at the Aalto Arena fair

The first validation as well as contact formation happened in November 2013 at the Aalto University's Arena fair. This is Finland's largest contacting forum for Business School students, with on average 60 companies taking part by mainly their HR and Communications managers. The 25 biggest companies in the fair were contacted, asking them questions about ESS usage in their organizations. The aim was to get answers for the following topics:

- 1. Does the company have an ESS in place, and how extensively they were using it.
- 2. Does the company have some measurement actions on ESS.

 Additionally, they were asked whether someone in their company would like to participate in the research for future interviews in case they had an ESS in place or its implementation in process.

3.1.2. Preliminary interviews with large companies

For the second validation round, two semi-structured interviews were conducted with two large companies from different fields: finance and manufacturing industry. Both of these were large corporations acting internationally. The questionnaire pattern for the preliminary interview can be found in Appendix 1.

3.1.3. Outcomes of the validation process

The results of both of the validation processes were clear: no company had an ESS in a mature state in their organizations, and some had not even started the process. Consequently, the measurement of these software was not much in place, although the implementation was ongoing or planned.

This preliminary finding directed the research focus towards the bigger picture of ESS rather than mere ESS measurement practices. The questionnaire pattern was iterated slightly, and the final interview pattern is found in Appendix 2.

Additionally, due to the networking at the Arena fair and continuous contacting after that, a large number of potential interviewees was received. Knowing the possibility to interview Finland's largest companies, the topic was reformulated towards the current status and use of Enterprise Social Software in Finland, and the best practices in implementation. The subject felt very relevant, as many interviewees in the Arena fair told that they would be interested in hearing how other companies are doing regarding these tools, and how they have accomplished the implementation of Enterprise Social.

3.2. Full-length interviews

Overall, a total of 18 full-length were interviews conducted during Winter-Spring 2013-2014. The first two ones were pilot interviews to fine-tune the interview structure, but the information gained from them is equally relevant for this study.

The interviews were semi-structured, and they generally lasted for one hour. They comprised three main parts: the current ways of communication within the company; the ESS usage and adoption in the company; and the implementation process for ESS. The full list of questions can be found in Appendix 2.

A part of the interviews were recorded, and in the interviews where the recording was not possible, extensive notes were taken during and right after the interviews. The data was analyzed by exploring all the notes and records firstly without any specific target in mind, and secondly, with respect to the specific questions in this research: firstly the overview on the ESS field and status in companies, and then the implementation steps used were gathered. Finally, the implementation steps were compared with the preliminary framework and differences were marked.

3.2.1. Companies selected for the full-length interviews

The companies for the interviews were selected among Finland's largest companies listed by Talouselämä (2014). A third of the respondent companies belong to Finland's largest top-10 companies, and two thirds are listed in the top-50. The rest are not small either, since they are inside the top-100. Only the first pre-interviewed company is not listed in the Finnish top-500 companies, as it was a large company in other Nordic countries. That company was selected, as it had already implemented an ESS, and thus had valuable insights about the implementation process. The list of interviewed companies can be found in Appendix 3.

Another criterion was to gain as versatile a view as possible on different fields; hence different types of companies from the manufacturing industry to retailing, ICT and banking industries were included. The respondents consisted of the communications or development managers and

specialists, whose main responsibilities were generally the company intranet, internal communication tools or social media.

3.3. The survey

To support the interview data a survey targeted for the largest companies in Finland was created in addition to the interviews. The aim of the survey was to gain solid background information and verification for the interview results, and the survey questions can be found in Appendix 4. The survey was sent to 100 large companies in Finland. A total of 35 responses from different fields were received. Sixty-five percent of the respondents represented the Communications department, and 23% were from IT. The rest was from different functions, like Business Development and HR.

4. INSIGHTS FROM THE INTERVIEWS AND SURVEY

The research was divided into two main topics, the state of Enterprise Social in Finland and the best practices for its implementation, and this chapter will also be divided accordingly.

4.1. The state of Enterprise Social Software in large companies in Finland

Enterprise Social Software belongs to the vast set of internal communications, and it is today difficult to draw a line between intranet, ESS, workspaces, and so on. Hence, the first issue was to open up the current internal communicative landscape inside companies, and not limiting the insights into ESS only. In this part the internal communication will be discussed more broadly, covering mainly email and intranet, and after that the discussion moves into the ESS use in the companies. Finally, the most cited challenges with ESS usage are listed.

4.1.1. Internal communication still largely a combination of email and intranet

Internal communication is still highly dependent on email, although many interviewees are proactively trying to break this habit. Eleven interviewees mentioned spontaneously that email is too much used. Arguments for this were that email is designed to one-on-one discussions, but in today's business there is a larger need to communicate within groups, and for that use email offers poor functionality. Moreover, some brought up the fact that knowledge vanishes in email boxes, while in new social platforms old information and conversations can be found by many people. In some companies the bottom line was clearly that the email overload makes work simply inefficient.

The good news is that there has been some relief in the email communication overload due to the growing popularity and development of instant messaging (IM) tools. The interviewees were generally very pleased with the IM tools, and most of them deployed Microsoft's Lync. However, people still have a strong tendency to use email, as it was in most companies one of the few communicative tools offered for mobile use - and mobility as a trend is increasing in all

companies. Thus, while there are no other solutions offered, the employees will use only email via mobile.

When it comes to the intranets, the field is complex to cover, as the intranet is a term that has many interpretations from its emergence in 1995. A definition that includes both technical and functional views define it as the company's network that includes web-based applications, which are protected by firewalls, and which support business applications (Martini et al., 2009). Among the 18 interviewees, three had an IBM-based intranet, 15 had a Microsoft-based, one had EpiServer and one had Confluence-based intranet. As can be seen, there are companies that count that they have more than one technology as an intranet. This is due to the fact that the term intranet means different things for different people:

"It is very difficult to specify what an intranet is these days". (Respondent 2)

Some companies see the intranet as a mere communicative tool that consists of the information flow from the corporation to the employees. Others see it as combination of a communicative tool and workspaces or other functionalities. Half of the respondents mentioned multiple different software applications from different ecosystems – from IBM and Microsoft mainly. Another explication for the large amount of intranet tools is the size and complexity of these companies: they simply have different platforms in different places of the organization. A good example was a company that had many different platforms for different business units, due to the complex company IT-structure that had developed as a consequence of mergers and company acquisitions.

Product-wise, the most common intranet was MS SharePoint in its different versions, from 2007 to 2013. Ten companies had deployed also some social features of SharePoint, like the newsfeed, commenting and liking, but the adoption level of these social features was in most cases very vague. SharePoint is well known in these companies for its workspace features, and in the majority of the companies SharePoint was deployed as the team space platform. The other platforms – IBM, Confluence or EpiServer – were the main platform in only four cases.

There is an ongoing change in the internal communications area, as the technology changes constantly. Among all the interviewed companies, 15 out of 18 had specific plans or were in the process of upgrading or changing their platform. Half of the companies were about to reconsider the entire platform; for example two companies wanted to select a coherent platform, as they now had too much different products and services in use in different parts of the organization. The trend seemed overall to be cutting out complexity – the interviewees were either driving change towards a communicative set that is coherent and more out-of-the-box, and others were waiting for the products to be even better integrated before they would make their selection. Hence, it can be concluded that many large companies are now making big platform-related decisions, as they want to streamline the selection of different products offered to employees. One interviewee declared:

"I hope that when the decision about the platform is made, the top management, IT and communications will be involved – I really want the next platform to be streamlined with all functions." (Respondent 1)

4.1.2. Large companies have many different Enterprise Social Software in use

A large majority of the interviewed organizations had experienced some ESS usage – either via a formal launch, restricted piloting or via an uncontrolled employee initiative. There were five different software applications mentioned in the interviews: Yammer, IBM Connections, Salesforce Chatter, SocialCast and SharePoint's social features. Among the interviewees, 11 out of 18 companies had implemented some (or many) of these tools. Five companies were in the middle of piloting or testing the solution, and two companies had not yet started a pilot or implementation during the time of the interviews.

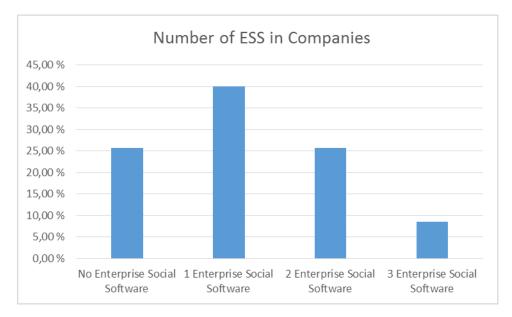


Figure 2: The amount of ESS in companies (survey results)

The results from the online survey (N=35) are represented in Figure 2. We can see that it supports the results from the interviews; most companies have one or more ESS solutions in use, but there are still 25% of respondents that have not adopted any ESS yet. When it comes to the detailed survey responses, interestingly there were just a few same combinations of different platforms, even though 34% of the respondents had two or more Enterprise Social platforms.

The amount of companies with two to three ESS is quite high, considering that the benefits for most of these tools increase for the company when all employees meet in one platform. This is most probably due to the fact that the survey respondents as well as the interviewees represent large companies, where many different tools can be adopted in different parts of the organization. At the early stage there are competing platforms, but as mentioned already before, many interviewees declared that they want to reduce the amount of complexity experienced within these tools also.

4.1.3. Microsoft leads in Enterprise Social Software competition

With respect to specific Enterprise Social Software, Yammer is leading in both the interview and survey responses. Sixty percent of the survey respondents had Yammer in their company (Figure 3). Also, as many as 15 out of 18 companies interviewed had experienced some Yammer usage.

Eight of these cases were company-driven pilots or launches, and seven cases were employeedriven due to the tool's freemium business model: Yammer network can be created by anyone in the company, and many times the employees had just created the network and invited their coworkers there without any official statement from the company.

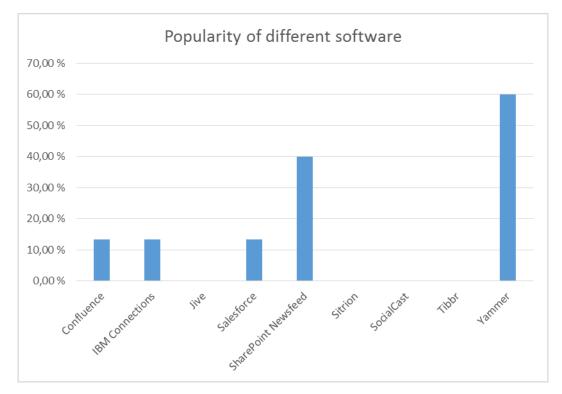


Figure 3: The popularity of different ESS (survey results)

Regarding the other tools, the survey responses support well the interview results. As was stated above, 10 out of 18 interviewed companies had implemented the social features of SharePoint. Also in the survey responses SharePoint was the second most common ESS platform by 40% of popularity. However, insights from the interviews indicated that the usage of SharePoint's social features was very limited in most of these cases, either due to change resistance or the novelty of the deployment.

The rest of the survey responses were divided equally between Confluence, IBM Connections and Salesforce's Chatter by a popularity of 15% each. This supports the insights from the interviews. Four out of 18 companies were using IBM Connections, one of them in a piloting

phase. Chatter was mentioned in three companies, and Confluence in two. The most often mentioned as a successful tool after implementation was actually Salesforce's Chatter – in three companies it was used by a restricted group, usually sales. Chatter is integrated to Salesforce's CRM tool, and it was praised for responding to a real business case and therefore the adoption had largely been a success. Like SharePoint's social features, these tools are implemented in a company-driven way, and they do not have a freemium model like Yammer.

Regarding the other tools, there were not many tools named. From the survey responses one company was deploying Liferay's social features, and one had started to implement Google's platform. From the interviewed companies, only one had a different tool. They had previously had heavy usage of SocialCast, which had been recently switched to Yammer.

4.1.1. Tagging and following are difficult to understand

Among those survey respondents who already had implemented some Enterprise Social tools, an additional question was posed about which type of functionalities they have in their company. Surprisingly many had implemented most types of the functionalities in question - the lowest percent of adopted tool types was 48% for microblogging, followed by the functions of tagging (57%) and following (65%) (Figure 4). The most implemented functionality types were blogs (96%), commenting (96%), group/workspaces (91%), wikis (83%), liking (83%) and newsfeed (83%).

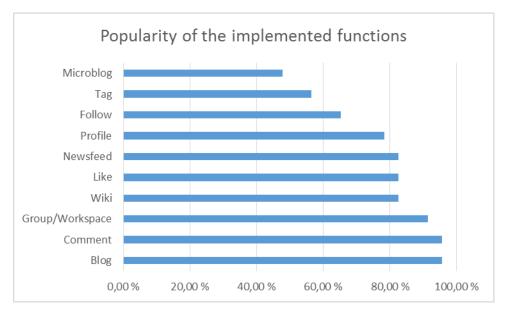


Figure 4: The popularity of different ESS functionalities

The respondents were additionally asked to rate the success of adoption of the functionalities they had implemented. The scale was "resistant", "neutral", "engaged with support" and "fully engaged and experimenting". The scale was rated from 1 to 4 accordingly, and for all tools an average was calculated. The results showed that there were differences in the adoptions of these functionalities: by far the most successful adoption was for group/workspaces with an average of 3,22, commenting being the next most adopted function with an average of 2,68. On the other hand, tagging was the least well engaging function with an average of 2,00, preceded by the following functionality (2,19). This supports the insights from the interviews; as tagging was perceived as difficult to understand for employees, and following was also mentioned to be used very little. Moreover, in some platforms there was not yet a possibility to follow topics, only people, which according to the interviewees resulted in lower usage rates.

4.1.2. Challenges of Enterprise Social

There were many challenges that the interviewees brought up, as most of the companies were in the middle of the implementation process. Four main challenges came up in the interviews: the diversity of cultures, the diversity of jobs, the change resistance and unfamiliarity of social functions. Many of the interviewed companies, as they are among Finland's top companies, are operating in multiple countries with diverse cultural backgrounds. One interviewee brought up that the ways of communication vary quite much depending on the site and country, and this causes challenges in making decisions about the best platform and ways to communicate in the future. Cultural differences can also bring positive aspects to ESS implementation, as in one company the US managers had adopted the new social tools very naturally, and now they showed good example to the managers in the other countries.

The diversity of cultures was often mentioned, but maybe a bigger challenge was the diversity of jobs – the blue collar workers were often noted in this context. For instance, in some companies the blue collar workers did not even have access to the company communicative intranet, and now there was the question about how to make them part of the Enterprise Social. In the manufacturing plants the case was often that the employees did only have a few common computers. They might not even have emails or other credentials, so they did not have means to sign in to these platforms. As the ESS relies mostly on people's own identities, this was and still is a big challenge for many companies.

Learning the new, social ways is a big change for many companies. This manifests especially in companies where the employees are older, and obviously in large companies where there is much variety of ages and skillsets in social media. Understanding is the first problem, as there are functions, like tagging, that can be totally new to many employees. This requires much training, but at the same time the new platform is commonly thought to be easy to use and thus not requiring much training. However, there is clearly need for training, emphasized many interviewees. One interviewee explained that in the past the people had been told that they cannot try any new technical tools, or they would break them. Consequently, many employees are afraid of "doing it wrong", and are facing new tools with caution and stress. Unlearning these old habits takes more time than learning new ones, and it really takes some time for the employees to learn these new tools, however easy they might appear to the ones driving the adoption.

The last challenge often mentioned was also related to the unlearning of old habits – it was about the change resistance for the openness and sociality of the new world. This was also perceived by Fuchs-Kittowaki et al. (2009) as the top barrier to adoption. Many knowledge workers have learned that their knowledge is their own asset that keeps them safe in the company. When starting to share this knowledge, some employees feel resistance towards the openness, and prefer to remain silent. Also many employees feel shy at first, since it is a big change in a large company if everyone can read their posts and ideas. They do not feel comfortable, and at first there might become a culture, where the posts are very elaborated and well thought. These cultural challenges are present for a while, and they make the implementation a long process that is not just about technicalities, but mostly about culture.

4.1.1. Conclusion of the state of ESS in Finland's largest organizations

The Enterprise Social is now at the breaking point in Finland's largest companies. The majority of companies are in the middle of implementation or have implemented some ESS features recently. Only few have adopted a wide set of ESS features, or have achieved to make the tool as an integral part of the company's daily work. There are also some 25% of companies that are still waiting to see how the early adopters implement the tools, or how the tools evolve.

Product-wise, Microsoft is the clear leader in ESS solutions, IBM being the second most common. Still, in large companies it is common that there are many Enterprise Social solutions in place, as they can originate from mergers, company acquisitions or simply as by-products. The aim in most companies is to cut out complexity, and there are major platform-related decisions going on in many companies. The goal for many is to streamline their IT landscape, and to move towards OOB (Out-Of-the-Box) solutions.

Although the aim is to become more social and adopt new ways of working, the change is slow, and there are many challenges originating from different cultural backgrounds and also different types of jobs, which are typical in large organizations. The communication is still much dependent on email, but the will is to go forward into more transparent and social communication style. This requires time and willingness to change the entire company culture.

4.2. The implementation of Enterprise Social Software

To repeat, ESS implementation is a long process, not a short project. Sixteen of the interviewed companies were in the ESS process, and this chapter gathers the best practices and most common activities from their experiences. The survey results are used as background support for the interview insights. The experiences are divided according to the preliminary implementation framework built in the theoretical part, and at the end additional remarks and best practices that were not included in the framework are presented.

Almost all interviewed companies had adopted some Enterprise Social Software; and as stated earlier, the most commonly used were MS SharePoint's social features and Yammer, but also IBM Connections, Confluence and Salesforce's Chatter had been deployed. The scale of adoption was broad between the companies: two companies had not yet started to implement ESS tools, and some had years of experience of them. One respondent even declared:

"People wouldn't survive anymore without [ESS name]." (Respondent 18)

The online survey responses presented in Figure 5 support this view of very diverse ESS backgrounds. We can see that about a quarter has not adopted any Enterprise Social Software. However, regarding the rest the results look good: only 2,5% are in an undeveloped stage, whereas 23% have ESS tools for some pioneers or pilot groups, almost 30% of the companies have ESS tools on a departmental level, and as much as 20% have ESS tools as an integrated part of their working environment.

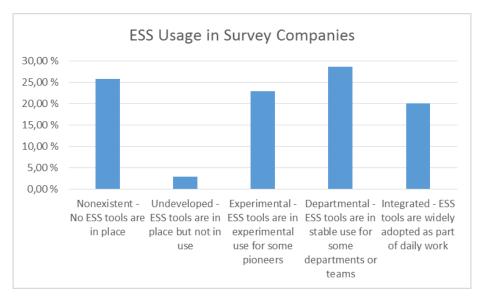


Figure 5: The ESS usage in companies (survey results)

This is the direction and aim for many companies in Finland currently, and therefore the best practices for implementation in these companies are discussed in this chapter. As the processes were seldom in mature phases, and the measuring of Enterprise Social is perceived as a challenging field, the successful steps portray the interviewees' subjective perceptions of the adoption-facilitating activities. The focus is not technology-specific, as the implementation processes can be compared although the platform would differ, like the following quote reveals:

"The implementation was not difficult regarding the software. It's the cultural change that makes it an ongoing journey". (Respondent 1)

4.2.1. Assessing the organization and the possible tool

The assessment of the possible tool was not often analyzed in detail. Usually the companies wanted to conduct a platform analysis before the ESS decision, regarding the whole IT and Communications landscape. In these cases the choice at hand was commonly: IBM or Microsoft. Although IBM was not that much implemented by the interviewed companies, it was often considered among them. As stated in the previous chapter, there are and will be discussions about the future platform to invest. Therefore, the assessment is generally conducted on a platform-level, not product-wise, although these often go hand-in-hand.

The most common tool assessment method was piloting. One company even had three different pilots from different tools (one still ongoing), as they had received two of them as by-products. However, the "free" tools can also lead to a situation where the tools are not used, as had happened in one company: the tools came from the group level for free, but they were not implemented in Finland, as there was no clear purpose, need or resources for them. There were also three companies that had received new tools from company acquisitions and mergers. In these cases the companies noticed that the tools stayed only among the acquired units, unless the company made clear decisions and implementation plans for what is the main ESS platform and how all divisions would adopt it.

The most common situations with the ESS implementations were that the tools were decided already on a higher level, they came as a by-product for free, or as an integrated part of the existing platform when upgrading to the next level. Overall, the tools are in most cases given from the IT or upper management, due to platform-related decisions, and there is not much room for the assessment part product-wise. In the online survey, only 14% of the respondents had conducted a technology and fit assessment.

Regarding the assessment of the organization, it was also rather rare as only 23% of the respondents had conducted this assessment. This supports the interview results, since only in a few rare cases there had been questionnaires and usability testing to find out the readiness of the organization for Enterprise Social. This was mostly due to the fact that the tools were given when the process started, and the ESS tools are not much configurable. Hence the resources are rather allocated to other activities in implementation.

4.2.2. Determining the targets

A real concept or defined targets behind the technology were present in quite few companies – the processes went often quickly to implementation or pilot, where the concept and targets were being discovered. Usually, there was a vague idea or a vision, but the targets got more concrete during the process of implementation.

The idea for implementing ESS came often either by the employee pressure or platform-related decision. One of the main reasons for most interviewees was that there was a growing pressure from the employees towards social collaboration tools – for some it was the adoption of the free Yammer version, and in a couple of companies there was even Facebook and other consumer-side solutions taken in use unofficially to fill the Enterprise Social gap. The important fact from the interviews was that only one of the employee-driven Yammer adoptions had lead to permanent usage of Yammer. Most of these cases lasted for a couple of weeks, but due to the fact that there were no clear targets, the usage dropped.

Although many companies did not have clear targets, there were a few common targets mentioned in the interviews. A very concrete one was to reduce the amount of email, and other common reasons were the potential of knowledge sharing, collaboration, expert finding, making knowledge transparent and keeping it inside the company. The companies wanted to make social a natural and clear way of working. A common target for many was to make the employees talk together and break existing silos. An interviewee discusses their target iteration:

"The vision of being more social comes from the concept, from above. But the real targets are formed - - inside the discussions with HR and other function managers. The top management decides the direction, and it's important." (Respondent 14)

To sum it up, the interviewees stated that the adoption does not require a sharp concept at the very beginning, but company support and company-wide vision are good to reach company-level usage. The online survey results showed slightly more popularity to the target and vision actions: the vision was defined by 64% of the respondents, whereas objectives were defined by 50% and the specific ESS project was defined by 60% of the companies. However, it was not stated in the questionnaire at which point the targets had been defined, so the conclusion is that the vision is good to have already at the beginning, and targets clarified at least along the process.

4.2.3. Involving important stakeholders

The issue of involving important stakeholders and product champions was a very important and much discussed step in the interviews, and hence the discussion is divided into two chapters: the

involvement of important stakeholders and the involvement of product champions. Also in the survey, "Involve important stakeholders" was the second most common action with 68% of respondents selecting it.

Absolutely the most important stakeholder group that influenced the implementation was management, according to the interviews. However, management support was a subject that many interviewees had mixed feelings for. Most of them said that management has theoretically bought the idea, but that concrete support is still missing. Concrete management support was very often mentioned as a highly important factor for the success of implementation, and hence these insights should be taken into consideration.

The most commonly mentioned managerial way of supporting the implementation is blogging, but many interviewees hoped for actual, work-related actions to be moved into the Enterprise Social platform. Examples were taking management memos and other material only to ESS, so that the subordinates would be forced to start working with the new tool. These kind of real examples had shown that employees take the solution more seriously once management uses the tool, too. The implementation team can also facilitate the managerial support; in some companies the implementation team had immediately created a management group and groups for each manager and their subordinates, in order to emphasize the top-down adoption process.

Regarding negative aspects brought up, the management can really easily affect negatively or even kill the implementation. In one company there was a manager that had proactively been against the Enterprise Social platform, which had obviously had an effect to the company's Enterprise Social path, since they were only now starting to consider taking an ESS into use, although already three years ago there was unofficial usage of an ESS. The management had then denied discussing work-related topics in the platform, and the usage had dropped. There was a clear need for the platform, but the management resistance had lead to the delay of the adoption by at least three years. Hence, the involvement and agreement from the managerial side is a necessity.

When it comes to other important stakeholders, the IT, Communications and HR personnel were most often mentioned. These are the key employees and managers that are the closest to these

tools, and usually were the driving forces of the ESS implementation process. Although the project management would not consist of all these functions, the interviews indicated that it would be beneficial if all of these functions would be at least partially present. Especially when the implementation has started, it is important to have all of these key stakeholders - including management - properly trained and motivated for the project.

Overall, a key conclusion from many interviews was that management needs to be involved. For that it is important that the management and other key users, like IT and Communication managers, are properly trained and aware of the possibilities of the platform, so that they can stand out as role models and be of concrete support for the project.

4.2.4. Involving product champions

The involvement of product champions deserves its own section, since the usage of community management or key user network, or in some cases both, was perceived as a very important part to the success of the implementation. It was common in the interviewed companies that there was an existing key user network, consisting usually of some IT or Communications employees, and these people were given the new tools before others. These key users were often from intranet or other technical key user function, where more technical knowledge was needed.

Still, the technical awareness was not the key to the success in ESS key user networks, as the platforms are generally easy to use, and the idea is to encourage employees on the grass-root level, not just to be of technical help. Hence, the best key users were not the technical experts, but motivated employees and managers in quite different parts of the organization. In one case there were support people from all different locations who had volunteered for the job – which was indeed a more communicative, motivational and supportive role than a technical one. The company had found this as an extremely good way to implement new tools, especially the new social features.

An important question regarding the key user network is how to recruit these "ambassadors", and also how to keep them interested. The most advanced companies that used the ambassador scheme had recruited volunteers (instead of naming them), either by questionnaires or just marketing the positions. One company had included some common activities to the role to keep them motivated: they organize reunions once a year just with that key user group, and additionally the key users may get sometimes tickets to concerts, and other fun activities. However, the willingness for the job is the main motivator according to the interviewee, and good team spirit makes the task also easier; they have their own workspace where they can share ideas, comments and best practices.

With respect to community management, a minority of the interviewed companies had implemented such a role. However, in cases with the most active usage of a specific ESS providing many functionalities, the companies had implemented that role. They stated that the need for community management was constantly growing, as the usage was too. The community management does not need to be a result of many years of planning in order to succeed: in one company the ESS started spreading virally very quickly, and hence the management made quick decisions on the roll-out plan. The first thing they did however, was appointing community managers. They now have thousands of active users in ESS, and the quick roll-out succeeded.

The community management role has not yet become very common, and it is usually still an additional role for some Communications or IT department's employee responsible for internal communication methods. One company was appointing two community managers; one from IT and one from Communications – this way both aspects were taken into consideration. The task usually consists of the ownership of the tool and its adoption – hence the community manager takes care that enough official training and marketing is done for raising knowledge and awareness, but also promoting the grass-root level activities in order to encourage usage. A community manager described parts of her role:

"I promote and market the new tool - - and go check if in the groups I manage there are any questions or misplaced comments. I also comment and encourage. I try to be active in all important groups - - also I act as a support line via phone, you can call and ask me anything." (Respondent 11)

Some companies have given the community manager responsibility to specific business case leaders, and they had found it a good way to succeed in the adoption. This way there was no

single community manager, but many micromanagers managing their business case. They did not talk about community management, but the business case leaders were acting as community managers in their own business case.

To summarize, community management and key user networks are both essential parts in ESS implementations, especially in large companies. The community management usually meant the ownership of the platform adoption, and that the key users are acting as grass-root level help and motivation for the employees in all over the company – this is why in large organizations the need is larger for these ambassadors and motivated community managers.

4.2.5. Conducting pilot groups

Piloting was seen among the interviewees as a very important step in the implementation process. As much as two third of the interviewees had conducted or were in the middle of piloting. Also in the online survey, half of the respondents had conducted or were in the middle of a pilot.

Companies had different starting points for pilot groups. Most had a vague idea what they wanted from the system, and hoped for the pilot to crystallize the targets. On the other hand, some had a clear target set before the pilot, while a couple of companies had no targets at all. The majority of the interviewees had still merely a direction in mind before piloting rather than a full list of specified targets. Also the duration of the piloting phase varied much - there were pilots of three years' duration, and some were alive for just some months.

Commonly there was only one tool for piloting, but there were also a few companies with many pilots: one company had even three simultaneous pilots of different software, in the aim of finding out which would be the most beneficial for them. Additionally, there were cases where the company had both the free and premium versions of the same product at the same time; the free version was for the whole company whereas the enterprise-version was for a specific group with a specific need. This way they could verify the benefits of both systems.

The interviewees brought up many factors that made a pilot successful. Easy access was one major factor that got people on-board. This is why the integration to other company platforms or tools is so essential, and the battle for the primary platform is going strong between suppliers.

The other major factor was having a business case already for the pilot group: one interviewee stated that for the pilot group the business case is equally important as for the actual launch - if you only say "welcome to discuss" the usage will only go forward in case there are social media savvy people in the pilot. In the large companies interviewed with people of very varying social media skillsets, it was not evident that there would be many social media active employees.

The most often stated success factor for piloting was however the community management – or key users, champions or ambassadors – in whichever term they were called in different companies. There were a few cases where the ambassadors were responsible for the business case, training and support in the piloting phase, and it worked well for the companies. Training overall was an integral part of piloting in most companies, although the platforms were considered easy to use. Actually, the only negative experiences from piloting came from cases where there was no community management or training for the system.

The pilots were normally among some specific departments, and in some cases it started to go viral to other departments of the company – so the pilots were generally not restricted. Still, one company made the pilot restricted so that only some people were accepted to attend. During the interview time, there was a queue of people waiting to get in to the pilot. They were going to dismiss the inactive employees from the platform and bring in new that could actually benefit from it. The pilot is going very well, so the plan for the restricted pilot worked for them. The free adoption in other companies worked also among the cases where there was a clear business need for the tools.

The targets for pilot groups were varying, but the most important outcomes were the finding of business cases and the involvement of key stakeholders. The pilot groups were generally IT or Communication teams, but other small and targeted business cases were also popular and perceived as successful. They generated good insights on the actual benefits and challenges of the platform for general users. Another pilot group that was perceived as highly important was management. This was a way to engage them with the system in an early phase.

As a conclusion, pilot groups are seen as a vital part of the implementation process, but more in a conceptual and integrative way than as a technical "proof of concept". Hence, the pilot groups

should be selected with care in order to maximize the benefits from them, which are the invention of business cases and involvement of key stakeholders. There is also a selection to be made; either to prefer restricted groups or allow the possibility that the platform will gather users outside the pilot, and may result in early adoption in the company as a whole.

4.2.1. Planning the implementation, and informing and training employees

This section discusses two steps - planning the implementation and informing and training employees - as the planning of the implementation is tightly linked to the actual implementation activities.

In most of the companies, the planning of the implementation consisted of planning the pilot usage, as well as marketing and communication activities for the major launch. Most of the companies that had implemented the solution, had made good internal communication plans, but also ad-hoc implementation communication is required on the platform, which requires roles and responsibilities mapping. In the online survey, 64% of the respondents had had workshops or other meetings for the implementation planning, and 68% had defined roles and responsibilities for the adoption.

Internal marketing campaigns are very popular, and one could even say a mandatory part of the ESS launch. The companies in question were large organizations with many employees, so it is quite rare that viral or small implementation efforts would reach everyone. This is why many companies had relied on very traditional marketing and communications actions with the official launch. Surprisingly, only 50% of the respondents of the online survey had formulated a communication or implementation plan.

The low rate of planning could be due to the pace of these adoptions, in case they happen very quickly due to them spreading virally. There were a few companies, where at first it seemed that there would not be need for any marketing or communication activities. Many employees started using the tool with no guidance, and it started to gather users very quickly at first, which indicated that there was a clear need for the tool since the beginning. Quickly they discovered, however, that although there were many early adopters, many other employees were too lazy or

ignorant to start using the tool without proper motivation, marketing and training. They quickly started pushing messages through basic information channels, especially the intranet, and went to different cities to train people on place. Particularly the training sessions resulted in high use of the tool. This is also remarked in the online survey results, as training was the number one action the respondents had taken, with 73% of popularity.

Regarding the actual implementation activities, the most commonly cited informative procedures were articles and news pieces in the intranet as well as company or management blogs. Another common action was sharing success stories of the cases that had benefited from the new tool – usually these cases were taken from the pilot use. Webinars and other e-learning tools, links to guides and tips of use were also shared. Competitions were also a good way to drive usage, as well as road shows that went to different locations. One interviewee outlined their implementation activities:

"The launch was very basic for the intranet, marketing campaigns and communication, events, e-learning tools - - for the more collaborative part we've been trying to make people share their best practices peer-to-peer - - more inside the system than in newsletters." (Respondent 16)

One successful methodology mentioned to get many people involved is to start with hobbies and fun related topics that interest people. An interviewee had noticed that a question about coffee drinking habits collected hundreds of comments, but the management discussions remained unanswered. This remarks an early phase of the adoption, where the familiar topics where one does not need to break boundaries are present. People may be timid first to comment on real business-related topics in from of everyone, so some might need this perspective before they start perceiving the work related benefits from the system. However, the most effective way to encourage people to talk was to have a real business case. This will be discussed further in Chapter 4.2.3.

Many of the implementations in the interviewed companies were at the same time also renewals of their intranets, which in these days get quite automatically much visibility. In large companies the basic communicative intranets are still very important tools that often have their own names and brands that are tied to the company brand. This explains some of the marketing activities, since in companies where the ESS was not linked to the intranet, the marketing efforts were generally smaller. However, the first moments of launch are essential, as the hype around the platform needs to be used to gather as much users as possible.

An additional fact that came up in many interviews was the continuous need for the marketing and communications efforts even after the first launch. The adoption is not a project but an ongoing process that can take years before the adoption has reached the targeted level (Weinberg et al., 2013). Since these are the first steps for an open social platform for most companies, the change in the culture takes time. This is why it was stressed that the communication and motivation should not be dismissed once the usage reaches an adequate level. A good example is that one company kept a 1-year birthday celebration with questionnaires about how people perceived the platform, and simultaneously gathered improvement ideas.

"One clear observation from the implementation is that it really needs some work and an action plan." (Respondent 4)

As a conclusion, there is a clear need for implementation activities and training. The first launch needs to be noticed, and the activities should continue long after that. The planning of these activities is important, and they should not be neglected, although the launch would seem to go well even without them.

4.2.2. Measuring success

Measuring was an ambiguous issue for most of the interviewees. The majority of them were following information of the number of visits, comments, and other easily accessible data, in order to see the tendency of usage - whether it was increasing or decreasing. Some were planning to follow the amount of email reduced, and some input rate, but most were still figuring out what to actually calculate and why. Additionally, most interviewees felt pressure from the management to offer some metrics from the implementation success, in a few cases monetary metrics also. These monetary benefits were hard to find, as the platform benefits are a combination of many different parts, like effectiveness and company culture, which are difficult

to measure. Only if the company was able to streamline the IT landscape and receive centralization benefits, it was somewhat possible to measure some part of the monetary benefits.

Many interviewees were also wondering what to do with the measuring, since it did not tell the full story of the reasons for usage. They felt that it was a good way to observe the tendencies, but more in-depth information could not be achieved by their prevalent measuring tools. For this matter, a few companies had selected to conduct surveys, either specific surveys for the ESS, or as part of the employee satisfaction survey. One way to do this was to firstly justify the platform selection upon employee survey: for example, companies found that the employees wanted closer dialogue with managers, and for this they offered the ESS tool at hand. After the full implementation, they were able to measure whether the survey responses had changed.

Overall, measuring was found important, but it was not perceived valuable in the long run unless it was justified. The interviewees did not want to do measuring just for the sake of measuring. In the online survey, the "measure success" activity was conducted by 41% of the respondents, which is aligned with the interview results. The measuring was perceived as a good way to check that the adoption is going to the right direction, but the real insights from the adoption were rather gathered by surveys and questionnaires.

4.2.3. Additional step: Business case

The community management, piloting, management support and elaborated marketing are vital parts of the implementation of an ESS, but the real question that influences the pace of the adoption reads: is there a business case for the tool? This topic came up very often in the interviews, and as such it deserves its own section in the results.

Salesforce's Chatter had succeeded in many companies, since it offers a specific tool for sales people and is integrated to the CRM system. However, most ESS are more general, and they offer many opportunities to use the various functionalities. This is both a chance and a challenge; the early adopters and social media active people can start using the functionalities that suit them best, but the employees that are not so comfortable with these tools may stay paralyzed unless the tools solve some work-related problem. The business case is thus the alpha and omega for the ESS implementation success. Many interviewees said that it is essential to be able to answer the question "what's in it for me" – but at the same time they said that obviously there is not only one single business case for the whole company, but many different use cases for different sectors, business units, functions or teams. This is why in one company the owner of the platform had taken action to go to all different parts of the organization to discuss how they could benefit from the tool. It obviously takes time and effort, and this is one example for what purpose the key users or ambassadors should be utilized.

It was common in the interviewed companies that there were a few business cases at first that represented the pilot cases. In most companies there was a clear need in the business units that adopted the tool well. After these early adopters the interviewees could only spread the word of the benefits of these business cases, and try to find new ones as much as they could. However, it takes time and effort, and hence the tools need to be used as often as possible and in as many contexts as possible. One company had major changes in their offices, and it used the new platform mainly to inform and discuss the changes. This motivated much the use of the platform.

It was clear from the interviews that all possibilities to make a use case of the new platform should be taken. The more concrete the need, the better. The usage can increase without a very concrete business case also, but it is slow, and might take years before the employees start finding the real business cases for themselves. This is why the search for the business cases is crucial.

4.2.1. Conclusion of the Enterprise Social implementation in Finland's largest companies

The interview insights were not completely identical compared to the theoretical implementation framework, but all of the stages were mentioned. The most common successful activities were involving important stakeholders, conducting pilot groups, and forming of real business cases. The least cited implementation actions were assessing the organization and tools, forming a governance plan, and measuring success. Next, a typical implementation process will be summarized, and after that the critical factors for successful implementation according to the interviewees will be concluded.

The implementation often started from the initiative of the employees, as they adopted some free social tools or features, and the management decided to provide a company-approved version. The targets set were generally vague at first, but the piloting was often used to understand the ESS more and iterate the objectives for it. Piloting was well appreciated, but its goals were mostly to bring out some success stories and learn about the use cases rather than technical testing. In most cases the successful implementation required very classical marketing and training activities, although the platform seemed easy to use and thus enabled viral deployment – the companies were so large that some communication activities were needed to spread the word. Lastly, the measuring was not very commonly adopted, although many companies followed the usage rates.

From the interviews three main critical success factors that were especially important for the ESS implementations can be concluded. The first critical factor according to the interviews was stakeholder support, especially that of management's. In most cases the interviewees felt that management support was not adequately concrete, although they would have bought the idea. The interviewees felt that a thorough implementation would have required concrete top-down implementation actions also. The second critical factor for successful implementation was the existence of a business case. Whether it was piloting or the launch to the entire company, the potential users needed to know what's in it for them, and how it helps them in their daily routines. The third critical factor was the community management and product champions. It was important that there was a person responsible for the Enterprise Social Software and its adoption as well as a large base of volunteers to support the usage on the grass-root level.

5. CREATION OF THE FINAL IMPLEMENTATION FRAMEWORK

The preliminary implementation framework built based on the literature was a generic one for any Enterprise Social implementations, outlining the essential parts of a successful adoption. The insights from the interviews of Finland's largest companies showed that all these steps were not necessary, and on the other hand some implementation activities were not mentioned or were not emphasized enough. Hence, the initial implementation framework needs to be adjusted accordingly to provide a successful ESS launch for large organizations in Finland. In this chapter the final implementation steps will be outlined, and explained how they were formed.

The preliminary implementation framework consisted of seven steps:

- 1. Determine the targets
- 2. Assess your organization and the possible tool
- 3. Involve important stakeholders and product champion
- 4. Iterate the full implementation plan through workshops
- 5. Conduct pilot groups
- 6. Inform and train employees
- 7. Measure success.

The evident steps to be included to the final framework were *Involve important stakeholders*, *Conduct pilot groups*, and *Inform and train employees*, as they were considered of high importance for the successful implementation by most of the interviewed companies. These steps are hence included in the final framework, but there are still some additions or modifications to these steps according to the interview insights. Firstly, important stakeholders are specified in more detail according to what were the most important ones for the interviewees. Secondly, the pilot groups and their outputs are also elaborated. Thirdly, also informing and training are given more specific details on what can be achieved. These modifications will be outlined and discussed in Chapter 5.2.

The steps that were additionally considered to be included in the final steps were *Determine the* targets, Assess the organization and possible tool, Iterate the full implementation plan through workshops and Measure success. These will be included in the final framework (some modified) based on their relevance to the successful implementation according to the interviewees. Firstly, targets were considered a good practice, but many did not perceive it as a necessity from the beginning. An overall image or vision should be in place, but the targets do not need to be concrete at first, they can be iterated later on when there is more knowledge on the real business cases. Secondly, the possible tool was not often assessed clearly, but there were implications on important platform-related decisions, which in many cases affected also the choice of the ESS tool. Hence this view needs to be broadened to assessing the entire IT landscape and platforms used. Additionally, the organization was not often assessed, or that was not perceived as an important factor, so it will be left out from the implementation framework. Thirdly, the implementation plan was considered an important part, so this step is kept in the implementation framework. Finally, measuring was often used to check the adoption rates, and not more profoundly assessing the usage or success of the implementation. Hence the measuring is part of the final framework, but in a less important role.

5.1. The final implementation steps

This part brings together the interview as well as the survey responses, in order to provide a coherent model for implementing Enterprise Social Software in large organizations in Finland.

1. Assess the IT landscape

Be attentive to the possible current Enterprise Social usage, and evaluate the platform decision as a whole – considering the intranet, workspaces and other platform functionalities.

Many large companies interviewed were currently at the crossroads pondering their future IT platform. This is obviously an important decision, not only because of the financial impact, but because the tendency for most was towards a simplified and streamlined IT landscape, which increases the impact of the selected platform. This included usually the communicative intranet, workspaces and collaborative tools. At the same time, in the largest organizations, there were

often different tools adopted in different parts of the company that needed to be considered equally, if there were already licenses purchased or heavy usage ongoing. This is why the IT landscape as a whole should be assessed thoroughly, before decisions on the selection of the tools are made.

2. Involve important stakeholders

Involve the most important stakeholders, especially the following:

- Management
- IT, HR & Communications functions
- *Community manager(s)*
- Product ambassadors

The management and functional leaders as well as key influencers from IT, HR and Communications should get on board at least before piloting. These were raised as relevant stakeholders according to the interviews, but still the most emphasis is on top management. The top-down approach starts from the very top, thus it is important to get the executive team as well as other managers to understand that they have a huge impact on the success of the implementation, and it requires concrete actions from them.

When it comes to the support of the bottom-up implementation, the community managers and product ambassadors were an important success factor. The community manager is generally the ESS tool or platform owner, who is responsible for the overall adoption and usage of the tool as well as recruitment of product ambassadors and other important stakeholders. It is important to have one leader for the process, but it was clear that in large organizations there is a need for many support persons or ambassadors that promote the tool, invent use cases, and overall help the usage and adoption at the grass root level.

3. Iterate targets, business cases and implementation plan through piloting

Use piloting to verify the business case(s) of the tool as well as targets. Involve important stakeholders via piloting. Plan the implementation according to the piloting experiences.

The targets do not need to be exactly clear when starting the Enterprise Social implementation process, as in many interviewed companies the targets were vague at the onset. However, a vision of the direction overall should be in place, and clear targets regarding the pilot. It is important to define the desired outcomes of the piloting – is it merely a way to get exclusively the most important stakeholders involved, or is it an open test that can turn into the real implementation in case word of mouth directs employees to the platform outside the pilot groups.

Piloting offers many possibilities. Firstly, through piloting the companies can observe what works in the platform on the grass-root level, and hence the business cases can be brought out. This is used to clarify what is the main meaning for the platform in the company, but also to collect good feedback and success stories. Secondly, it is a way to involve management and other key stakeholders like HR, IT and Communications, but also product ambassadors and other important influencers. This serves for the main implementation, as there are already skilled users that can show the way on how the platform works. Thirdly, piloting offers a good time to iterate the real implementation plan, starting from what worked in the trainings and other materials to how much marketing and via which channels would be required.

4. Implement the solution

Conduct at least the following activities when implementing the tool to the organization as a whole:

- Perform company-wide communication and marketing activities
- Organize training sessions, both live training and online learning options
- Provide ambassador and community manager support and marketing

A broad implementation was a big event for most companies, and the above is thus a good guideline for other large companies also. The organizations are vast, and hence the marketing efforts need to be notable to reach all employees when the tools are technically enabled for all.

The first enthusiasm needs to be utilized well, so the launch should be made a special event that makes people gather to the platform. This is where the ambassadors and community managers are highly important, as they take the message via word of mouth and encourage the usage from the early start. Although the platform may seem easy to use, training should not be left out. There are many employees that will struggle with the social media applications, and others need the training for motivational purposes. Hence, training should be offered in multiple forms: online learning as well as on-site training where it is most needed.

5. Follow and support the adoption

Measure the adoption and usage rates to understand the implementation process. Plan reminder activities, trainings and support for a long period of time.

The first moments of the implementation were important in many interviewed companies, but the change in the company culture takes a long time. It might even take years for the employees to find the best practices and use cases for the tools, and at first it might thus seem that there is very little usage potential. The real use cases and adoption need time, so it is normal that the usage increases still even months or years later. Hence, the adoption should be observed by measuring the adoption rates and sending out questionnaires for gathering more qualitative insights in order to understand the barriers and problems people are encountering. Additionally, the implementation support should be continued long after the initial launch. This means for instance trainings, reminders and competitions from top-down, but also community managers' and other product ambassadors' continuous support and promotion of the tools.

6. **DISCUSSION**

This research began with the words: we are now living a major change in enterprise communication and collaboration. It is an undeniable fact that the digital transformation on the internal communications field as well as other fields are changing the enterprise realm, some countries and industries faster than others. A recent research with 1500 respondents pointed out that out of the four major tech trends - Big data and analytics, Cloud, Mobile, and Social - the social had most deployment gains since 2012, which was a total of 106% (Carter & Hupfer, 2014). Organizations are seeing massive transformations in their innovation culture, R&D and internal communications overall, due to the Enterprise 2.0 tools (Fitzgerald et al., 2013). On the research arena the discussion is proceeding even further, with considerations of Enterprise 3.0, which introduces the Semantic Web to Enterprise 2.0 (Carbone et al., 2012).

However, this is only one side of the coin. The other one is the fact that companies continuously struggle with the implementation of these tools. According to MIT research, there is a mere 15% of companies in the mature state, whereas as much as 65% are ranked as "beginners" (Fitzgerald et al., 2013). In Finland's large companies, which is the focus for this study, the adoption process is at the beginning for most organizations – only 20% of the respondents were in the integrated state,, and as much as a quarter had not even started the journey towards Enterprise Social. Globally, the large companies have been found to struggle with the digital transformation due to distributed individuals and complex hierarchies and IT structures (Ellison et al., 2014), and this is also one factor for the low adoption rate in Finland. However, the major factor, deriving from the results of this research, is the lack of managerial will for the Enterprise Social adoption.

The results from this research support the view of Ellison et al. (ibid.) about the structural difficulties, as the majority of the interviewed companies currently pondered on platform-related issues. Many experienced either a complex IT structure due to mergers and acquisitions, and most of them felt that the diversity of employees, task- or location-wise, was a challenge for the adoption of Enterprise Social. McKinsey (2014) has recently found similar results, as in a survey of 850 large companies, the second most significant challenge to meeting priorities for digital programs is that the organizational structures are not designed for the digital era. These results

explain partly why the implementation of ESS has had, and still has, quite a low success rate. The need for a cultural change in ESS adoptions, pointed out from the results in this research, is quite demanding itself. When considering the results from the McKinsey survey, the requirements for companies regarding successful ESS adoption might even add up with a full reorganization of the company. This is very deviant from the views of the management, as the organizations expect, due to the similarity of social applications used in personal lives (e.g. Facebook and Twitter), that the employees adopt the tools quickly and easily (Krüger et al., 2013).

The fact is that the culture or the structure of the organizations will not change without the will of the top management. Alqahtani et al. (2014) state that if the platform is not endorsed by the management, it will be perceived as an overhead, and will not be accepted by employees. The concrete managerial support and leadership is demanded by basically every survey, research and interview results considering Enterprise Social implementation (e.g. Alqahtani et al., 2014; Fitzgerald et al., 2013; Janes et al., 2014; Louw & Mtsweti, 2013; McAfee, 2009; Yang et al., 2007). The results from this study made no exeption, as the concrete management support and activities were in the top three success factor for ESS adoption. However, most interviewees of this study indicated that the managerial support was missing, which is a common issue for failure in other researches too. Fitzgerald et al. (2013) found out that 93% of the employees are willing to change their habits if the CEO has a vision for it, but regarding the digital transformation, only 36% of CEOs have shared such a vision. This is worrying, although not surprising, regarding the low success rates of the ESS implementations (Gartner, 2013).

The other main success factors for implementation perceived by the interviewees of this study were a concrete business case and an active community management. Compared to the recent study from Alqahtani et al. (2014), there were similarities as managerial support and community managers were cited as mandatory for a successful launch. However, Alqahtani et al. (ibid.) emphasize also training, recognition, policies and target-setting as main success factors. Targets and trainings are also highlighted in the implementation framework developed in this research, but it regards training, policies and rewarding activities as secondary requirements compared to the managerial interest or business case for the platform.

Another major difference between this and Alqahtani et al.'s study was the target setting in the implementation process. The managerial planning and targets overall presented one main success factor in their research (ibid.). This was also emphasized already by McAfee (2009), who declared that the first steps of Enterprise Social initiatives should be forming the consensus about its goals (McAfee, 2009). Alqahtani et al. (ibid.) expressed it:

Like any other form of IT, Web 2.0 needs to be official, endorsed and planned by management.

This contradicts slightly with the results from this research, as the emphasis on targets was not perceived as important as in these other studies. It seems as a small difference, but in my opinion it represents a larger difference regarding the total implementation approach – in other forms of IT the implementation is truly top-down, but in the Enterprise Social case it should be both top-down and (more importantly) bottom-up (Louw & Mtsweni, 2013).

The managerial responsibility regarding the adoption is vast and mandatory, that cannot be argued against. However, the interviewees in this study perceived that the targets cannot really be clear when the process is at its beginning – if the idea is that the Enterprise Social will change the entire organizational culture, it is quite unrealistic that the targets could be clear at the very start. Also the business cases need to be taken into consideration in target-setting, and that can not happen in the top-level either. There is a growing research base stating that the real use cases for the Enterprise Social are essential in making the implementation successful (e.g. Weinberg et al., 2013; Wang et al., 2013; Chui et al., 2009). As the real business cases are the key to success, the top management should not be making clear targets and decisions about them. In large organizations the executive team is generally far away from the grass-root employee level, which is additionally diverse with respect to tasks, work culture and locations. The management should obviously drive the change with a vision (Fitzgerald et al., 2013), showing example with their own business cases and providing the organization with opportunities to adopt Enterprise Social, but the invention and drive of the concrete employee business cases and targets should happen nearer the grass-root level. This is why the community managers and other product champions are so essential – they represent both the managerial vision and the grass-root action. To sum it up, this approach represents the recommended combination of top-down and bottom-up, where top managers mainly enable the bottom-up adoption.

Overall, this study adds to the research base of the Enterprise Social literature by providing three success factors for the Enterprise Social adoption as well as a five-step implementation framework for ESS adoptions in large organizations. However, before starting to plan the implementation through the five steps, the large organizations need to consider whether they have the managerial support, business cases or community management available. Although the main aim of this study was to form a coherent implementation framework for the ESS, the most important lesson from the interviews was that the previous factors cannot be underestimated, as can be seen in the success rates of previous implementations of ESS around the world. As large companies in Finland are only now taking the first steps with the ESS tools, these lessons are of great importance to them as well as to large organizations in other countries.

7. SUMMARY AND CONCLUSIONS

This research had two goals: to provide a coherent view on the state of Enterprise Social Software usage in large companies in Finland, and to form a concise implementation framework for ESS inside the organizations. In order to fulfill the goals, the research first formed an overview by means of a literature review, providing a preliminary framework for ESS implementation. The initial findings from the current research base were scrutinized through an empirical study, in order to test the framework's applicability to the target population of large companies in Finland. The empirical part consisted of 18 full-length interviews and an online survey among Finland's largest companies. The analysis compared the findings to the preliminary framework, and based on the analysis, this framework was revised into a final framework to fit the needs of large organizations in Finland.

Results

The results consist of two parts: the Enterprise Social Software state and the implementation practices of them. The insights on the Enterprise Social adoption in large companies in Finland included a current view on internal communications, Enterprise Social use, the state of ESS and specific functionalities adopted as well as the most commonly mentioned challenges of the Enterprise Social. To sum up the results, the Enterprise Social is at its turning point, as most organizations have recently implemented ESS tools or are about to do that in the near future. Concerning internal communications, it is still mostly dependent on email and top-down communications, but this is changing towards a more transparent and collaborative mode with new tools changing the way of working, although the cultural change will still take long in most companies. The trend overall in the organizations is towards a more collaborative and streamlined IT landscape as well as cutting out complexity with out-of-the-box solutions, and hence, broader platform-related decisions are now in an important role. In Finland's largest organizations, Microsoft is currently leading both platform- and product-wise, but IBM is also often considered by the companies.

The second part of the thesis results consisted of refining the preliminary implementation framework according to the empirical findings. Three main success factors of the adoption of Enterprise Social were brought up; stakeholder and management support, existence of a business case, and implementation efforts of community manager and product champions. These are the factors that have the most influence on the success of the implementation. The resulting framework consisted of these and other steps that were considered important when implementing Enterprise Social applications in the target companies. The outcome was a combination of literature review findings modified by empirical research. The final framework provided general steps and specific actions relating to each step. The final steps and specifications are:

1. Assess the IT landscape

Be attentive to the possible current Enterprise Social usage, and evaluate the platform decision as a whole – considering the intranet, workspaces and other platform functionalities.

2. Involve important stakeholders

Involve the most important stakeholders, especially the following:

- Management
- IT, HR & Communications functions
- *Community manager*
- Product ambassadors

3. Iterate targets, business cases and implementation plan through piloting

Use piloting to verify the business case(s) of the tool as well as targets. Involve important stakeholders via piloting. Plan the implementation according to the piloting experiences.

4. Implement the solution

Conduct at least the following activities when implementing the tool to the organization as a whole:

- Company-wide communication and marketing activities
- Training sessions, both live and e-learning
- Ambassador and community manager support and marketing
- 5. Follow and support the adoption

Measure the adoption and usage rates to understand the implementation process. Plan reminder activities, trainings and support for a long period of time.

Theoretical contributions

The main theoretical contribution of this research is the creation of the implementation success factors and framework for Enterprise Social Software, the focus being at large companies in Finland. This provides an addition to the research base on Enterprise Social literature, specializing in the context of large companies and Finland, which have not been present in the current literature. Additionally, the research provides an overview on the terminology around Enterprise Social.

Managerial implications

For business use this study provides clear guidance on implementing Enterprise Social Software, as well as insights on the Enterprise Social state in large companies in Finland. The success factors and the framework are the main deliverables for managerial and business use; they point out the essential parts of ESS implementation, and open up these steps by explaining the most important activities that enable a successful ESS process. On a larger scale this research hopefully encourages the companies that have not yet implemented Enterprise Social to take the first steps, and enlightens the possibilities these tools can provide.

Limitations and further research

There were two main limitations of this research. Firstly, the goal for this research was extensive, aiming to give an outlook on the ESS field and implementation practices in large companies in Finland. This study covered the topic at a general level, but more research should be conducted

on this new topic in order to create solid analysis on the situation. In other words, the objectives of the study were broad considering the scale of the research, and hence there is a need for a larger base of interviews and especially survey responses in order to provide better insights on this scale.

Secondly, the success factors were interviewees' subjective estimates on the implementation activities that were beneficial for the implementation. When the implementation processes are in the mature stage, and available for full success analyses, there is a need for future research assessing the activities regarding the implementation success. Additionally, the developed implementation framework, that was the main contribution of this study, did not take into account the specific type or industry of the organization or any other influential factors that might have affected their experience. This is an area that needs further research; large companies in one cultural context (Finland) still have very different backgrounds and other factors affecting the adoption of ESS, and these factors should be further studied. Also, it would be interesting to study the methods of implementation from the small or medium-sized organizations for the comparison. As the ESS adoptions are increasing, this is an interesting and rewarding research area; all the companies interviewed were eager to learn from others' experiences in order to take full advantage of the Enterprise Social tools.

REFERENCES

Ahlqatani, F., Watson, J. & Partridge, H. (2014): "Organizational support and Enterprise Web 2.0 adoption: a qualitative study". *Proceedings of the twentieth Americas Conference on Information Systems*, Savannah, 2014.

Baxter, G. & Connolly, T. (2014): "Implementing Web 2.0 tools in organizations: feasibility of a systematic approach". *The Learning Organization*, 21, 1, 6-25.

Bebensee, T., Helms, R. & Spruit, M. (2011): "Exploring Web 2.0 applications as a means of bolstering up knowledge management". *Electronic Journal of Knowledge Management*, 9, 1–9.

Boyd. D. & Ellison, N. (2007): "Social Network Sites: Definition, History, and Scholarship." *Journal of Computer-Mediated Communication*, 13, 1, article 11.

Bragge, J., Relander, S., Sunikka, A. & Mannonen, P. (2007): "Enriching Literature Reviews with Computer-Assisted Research Mining. Case: Profiling Group Support Systems Research". *Proceedings of the 40th Hawaii International Conference on System Sciences HICSS*, Computer Society Press, Hawaii, USA, January 3-6, 2007, 1-10.

Briggs, R.O., de Vreede, G.J., & Nunamaker, J.F. (2003): "Collaboration Engineering with ThinkLets to Pursue Sustained Success with Group Support Systems". *Journal of Management Information Systems*, 19, 4, 31-64.

Carbone, F., Contreras, J., Hernandez, J. & Gomez-Perez J. (2012): "Open Innovation in an Enterprise 3.0 framework: three case studies". *Enterprise Systems with Applications*, 39, 8929-8939.

Carter, S. & Hupfer, S. (2014): "Raising the game: The IBM Business Tech Study". http://public.dhe.ibm.com/common/ssi/ecm/en/xie12347usen/XIE12347USEN.PDF Accessed on 4.9.2014 Consoli, D. (2013): "A Conceptual Model to Implement an Iterative and Collaborative Enterprise 2.0". *Informatica Economica*, 17, 3, 36-48.

Chui, M., Manyika, J., Bughin, J., Dobbs, R., Roxburgh, C., Sarrazin, H., Sands, G. & Westengren, M. (2012): "The social economy: unlocking the value and productivity through social technologies".

http://www.mckinsey.com/insights/high_tech_telecoms_internet/the_social_economy Accessed 13.1.2014.

Chui, M., Miller, A. & Roberts, R. (2009): "Six ways to make Web 2.0 work". *The McKinsley Quarterly*, 2/2009.

Cook, N. (2008). Enterprise 2.0 – How Social Software Will Change the Future of Work. *Gower Publishing Limited*, 43-82.

De Vreede, G., Wigert, B., De Vreede, T., Oh, O., Reiter-Palmon, R. & Briggs, R. (2014): "Information Technology for Enhance Team Problem Solving and Decision Making". *Computing Handbook. Information systems and information technology*, 3rd edition, 2014, CRC Press, Boca Raton, Florida, USA, 44-1 – 44-25.

Drakos, N., Mann, J. & Gotta, M. (2013): Magic Quadrant for Social Software in the Workplace. <u>http://www.gartner.com/technology/reprints.do?id=1-1JLTT2P&ct=130910&st=sb</u> Accessed on 1.6.2014.

Durao, F. & Dolog, P. (2012): "Improving tag-based recommendation with the collaborative value of wiki pages for knowledge sharing". *Journal of Ambient Intelligence and Humanized Computing*, 5, 1, 21-38.

Ellison, N., Gibbs, J. & Weber, M. (2014): "The Use of Enterprise Social Network Sites for Knowledge Sharing in Distributed Organizations: The Role of Organizational Affordances". *American Behavioral Scientist*, 1-21. http://abs.sagepub.com/content/early/2014/07/17/0002764214540510

ip.//abs.sagepub.com/content/carry/2014/07/17/00027042145405

Accessed on 4.9.2014.

Fitzgerald, M., Kruschwitz, N., Bonnet. D. & Welch, M. (2013): "Embracing Digital Technology: A New Strategic Imperative". <u>http://www.capgemini-consulting.com/resource-file-</u> <u>access/resource/pdf/embracing_digital_technology_a_new_strategic_imperative.pdf</u> Accessed on 4.9.2014

Fuchs-Kittowaki, F., Klassen, N., Faust, D. & Einhaus, J. (2009): "A Comparative Study of Web 2.0 in Enterprises". *Proceedings of I-KNOW'09 and I-SEMANTICS'09*, 2-4 September 2009, Graz, Austria.

Gardner, B. (2013): "Making sense of Enterprise 2.0". *The journal of information and knowledge management systems*, 43, 2, 149-160.

Gartner (2013): "Gartner Says the Vast Majority of Social Collaboration Initiatives Fail Due to Lack of Purpose", Press release, <u>http://www.gartner.com/newsroom/id/2402115</u> Accessed on 1.6.2014

Gulati, R. (2007): "Silo Busting". Harvard Business Review, 85, 5, 98-108.

Hofstede, G. (2001): "Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations". *Sage Publications*, Thousand Oaks, CA.

Janes, S., Patrick, K. & Dotsika, F. (2014): "Implementing a social intranet in a professional services environment through Web 2.0 technologies". *The Learning Organization*, 21, 1, 26-47.

Kügler, M., Smolnik, S. & Raeth, P. (2013): "Determining the Factors Influencing Enterprise Social Software Usage: Development of a Measurement Instrument for Empirical Assessment". *46th Hawaii International Conference on System Sciences*, Hawaii, 2013.

Kramer, W., Jenkins, B. & Katz, R. (2007): "The Role of the Information and Communications Technology Sector in Expanding Economic Opportunity". http://www.hks.harvard.edu/m<u>rcbg/CSRI/research/publications/report_22_EO%20ICT%20Final.pdf</u> Accessed on 1.7.2014.

Lee, G. & Xia, W. (2006): "Organizational size and IT innovation adoption: A meta-analysis". *Information & Management*, 43/8, 975-985.

Leftheriotis, I. & Giannakos, M.N. (2014): "Using social media for work: Losing your time or improving your work?", *Computers in Human Behavior*, 31, February, 134–142.

Leonardi, P., Huysman, M. & Steinfield, C. (2013): Enterprise Social Media: Definition, History, and Prospects for the Study of Social Technologies in Organizations. *Journal of Computer-Mediated Communication*, 19 (2013), 1–19.

Louw, R & Mtsweni, J. (2013): "Guiding principles for adopting and promoting Enterprise 2.0 collaboration technologies". *Proceedings of the 5th International Conference on Adaptive Science and Technology* (ICAST), 25-27 November 2013, Pretoria, South Africa, 1-6.

Martini, A., Corso, M. & Pellegrini, L. (2009): "An empirical roadmap for intranet evolution". *International Journal of Information Management*, 29, 295–308.

McAfee, A. (2009): "Enterprise 2.0: New Collaborative Tools for Your Organization's Toughest Challenges". *McGraw-Hill Professional*, Boston, MA.

McKinsey (2014): "The digital tipping point: McKinsey Global Survey results". Survey, http://www.mckinsey.com/insights/business_technology/the_digital_tipping_point_mckinsey_gl obal_survey_results

Accessed on 6.9.2014.

Muller, M., Freyne, J., Dugan, C., Millen, .D & Thom-Santelli, J. (2009): "Return On Contribution (ROC): A Metric for Enterprise Social Software". *ECSCW'09: Proceedings of the 11th European Conference on Computer Supported Cooperative Work*, September 7-11 2009, Vienna, Austria. Muller, M., Ehrlich, K., Matthews, T., Perer, A., Ronen, I. & Guy, I. (2012): "Diversity among Enterprise Online Communities: Collaborating, Teaming, and Innovating through Social Media". *CHI'12*, May 5-10 2012, Austin, Texas, USA.

Nedbal, D., Auinger, A. & Hochmeier, A. (2013): "Addressing Transparency, Communication and Participation in Enterprise 2.0 Projects". *Procedia Technology*, 9 (2013), 676 – 686.

Quintas, P., Lefrere, P. & Jones, G. (1997): "Knowledge Management: a Strategic Agenda". *Long Range Planning*, 30, 3, 385-391.

Ribière, V., Haddad, M. & Wiele P. (2010): "The impact of national culture traits on the usage of web 2.0 technologies". *The journal of information and knowledge management systems*, 40, ³/₄, 334-361.

Richter, A., Heidemann, J., Klier, M. & Behrendt, S. (2013): "Success Measurement of Enterprise Social Networks". *11th International Conference on Wirtschaftsinformatik*, 27th February – 01st March, Leipzig, Germany.

Richter, A., Stocker, A., Müller, S. & Avram, G. (2012): Knowledge management goals revisited. A cross-sectional analysis of social software adoption in corporate environments. *VINE: The Journal of Information and Knowledge Management Systems*, 43, 2, 132-148.

Riemer, K. & Richter, A. (2010): "Social software: agents for change or platforms for social reproduction? A case study on enterprise microblogging". *Proceedings of the 21st Australasian Conference on Information Systems*, Brisbane, Australia.

Saldanha, T. and Krishnan, M. (2010): "Organizational Adoption of Web 2.0 Technologies: An Empirical Analysis". *Proceedings of the Sixteenth Americas Conference on Information Systems*, Lima, Peru, August 12-15, 2010.

Sari B., Schaffers H., Kristensen K., Loh H. & Slagter R. (2008): Collaborative knowledge workers: web tools and workplace paradigms enabling enterprise collaboration 2.0. http://www.cweprojects.eu/pub/bscw.cgi/d1083684/Collaborative Knowledge Workers eChalle

nges Final.pdf

Accessed on 12.1.2014

Schmidt, K. & Bannon, L. (2013), "Constructing CSCW: The First Quarter Century", Computer Supported Cooperative Work, 22, 4-6, pp 345-372.

Stankovíc, M. & Jovanivíc, J. (2010): "Tag Fusion: A System for Integrations and Leveraging of Collaborative Tags". *Web 2.0 & Semantic Web, Annals of Information Systems*, 3-23.

Steinhüser, M., Smolnik, S. & Hoppe, U. (2011): "Towards a Measurement Model of Corporate Social Software Success – Evidence from an Exploratory Multiple Case Study". *44th Hawaii International Conference on Systems Sciences (HICSS)*, January 4-7 2011, Kauai, Hawaii, USA.

Talouselämä (2014): Suomen suurimmat yritykset. 20, 27-91.

Turban, E., Liang, P. & Wu, S. (2011) "A Framework for Adopting Collaboration 2.0 Tools for Virtual Group Decision Making". *Group Decision and Negotiation*, 20, 2, 137-154.

Von Krogh, G. (2012): "How does social software change knowledge management? Toward a strategic research agenda". *Journal of Strategic Information Systems*, 21, 154–164.

Wang, T., Jung, C., Kang, M., & Chung, Y. (2013): "Exploring determinants of adoption intentions towards Enterprise 2.0 applications: an empirical study". *Behaviour & Information Technology*, 2013, 1-17.

Weinberg, B., Ruyter, K., Dellarocas, C., Buck, M. & Keeling, D. (2013): "Destination social business: Exploring the organizations' journey with social media, collaborative community and expressive individuality". *Journal of interactive marketing*, 27, 4, 299-310.

Wenpin, T. (2001): "Knowledge Transfer in Intraorganizational Networks: Effects of Network Position and Absorptive Capacity on Business Unit Innovation and Performance". *Academy of Management Journal*, 44, 5, 996–1004. Yang, K., Lee, S. & Lee, S-G. (2007): "Adoption of information and communication technology: Impact of technology types, organization resources and management style". *Industrial Management & Data Management Systems*, 107, 9, 1257-1275.

APPENDICES

Appendix 1: Pre-interview questions in English

- 1. Interviewee's role in the organization
- 2. Generally the communication methods and means of communication inside the company. What technologies are in use, what are the plans for future?
- 3. What is the usage of ESS and why?
- 4. Why have these ESS been selected and do they have some targets?
- 5. Implementation process
 - a. Execution, activities, responsibilities, schedules and problems
 - b. Are there any best practices, or what would do if could do again?
- 6. What kinds of measurement models the company has taken for the software, and how are they used?
- 7. The future: what is expected in the company with these tools?

Appendix 2: Interview questions in English

- 8. Interviewee's role in the organization
- 9. Generally the communication methods and means of communication inside the company. What technologies are in use, what are the plans for future?
- 10. What is the usage of ESS and why?
- 11. Why have these ESS been selected and do they have some targets?
- 12. Implementation process
 - a. Execution, activities, responsibilities, schedules and problems
 - b. Are there any measurement systems?
 - c. What were the best practices and successful activities, or what would do if could do again?
- 13. The future: what is expected in the company with these tools?

Appendix 3: The interviewed companies

Company 1: A large international financial company headquartered in Sweden.

Company 2: A large industrial company.

Company 3: A large ICT and telecommunications company

- Company 4: A large retailing company
- Company 5: A large food industry company
- Company 6: A large global manufacturing and service company
- Company 7: A large international wood industry company
- Company 8: A large banking and insurance company
- Company 9: A large telecommunications company
- Company 10: A large international consulting and engineering company
- Company 11: A large multinational automation and power company
- Company 12: A large pension insurance company
- Company 13: A large international media group
- Company 14: A large international oil company
- Company 15: A large forest industry company
- Company 16: A large global manufacturing company
- Company 17: A large pharmaceutical company
- Company 18: A large ICT company

Appendix 4: The survey questions:

- 1. What is your job title?
 - a. CXO
 - b. Director
 - c. Manager
 - d. Team Leader

- e. Coordinator
- f. Specialist
- g. Planner
- h. Analyst
- i. Accountant
- j. Assistant
- k. Other
- 2. What is your department area?
 - a. IT
 - b. HR
 - c. Communications
 - d. Marketing
 - e. Sales
 - f. Business Development
 - g. Product Management
 - h. R&D
 - i. Supply Chain
 - j. Finance & Accounting
 - k. Customer Service
 - l. Other
- 3. What is the major field of your company?
 - a. Agriculture
 - b. Industry
 - c. Energy
 - d. Construction
 - e. Transportation
 - f. Retail
 - g. Information and communication
 - h. Finance and insurance
 - i. Professional services

- j. Public sector
- k. Other
- 4. What is the approximate amount of employees in your company?
 - a. < 500
 - $b. \ \ 501-5000$
 - c. 5001 10000
 - d. 10001 20000
 - e. 20001 30000
 - f. 30001 40000
 - g. 40001 50000
 - h. 50000 <
- 5. Is your company using some ESS or some features of Enterprise Social?
 - a. Yes
 - b. No
- 6. How would you describe your current stage of ESS adoption?
 - a. Nonexistent
 - b. Undeveloped
 - c. Experimental
 - d. Departmental
 - e. Integrated
- 7. If any, which of the following ESS tools your company has deployed?
 - a. Yammer
 - b. IBM Connections
 - c. SharePoint Newsfeed
 - d. SocialCast
 - e. Salesforce
 - f. Jive
 - g. Atlassian
 - h. Sitrion
 - i. Tibbr

- j. Other:
- 8. Which of there ESS features do you have in your company?
 - a. Wiki
 - b. Blog
 - c. Microblog
 - d. Newsfeed
 - e. Group/workspace
 - f. Tag
 - g. Like
 - h. Comment
 - i. Follow
 - j. Profile
 - k. Other:
- 9. Please rate from 1 to 4 the features you have implemented: what has been your employees' degree of adoption of these technologies?
- 10. Please select all the phases you have included in your implementation process:
 - a. Plan
 - i. Determine vision
 - ii. Ensure strategic alignment
 - iii. Determine objectives
 - iv. Enterprise 2.0 technology and fit assessment
 - v. Identify requirements
 - vi. Carry out organizational analysis
 - vii. Define the project
 - viii. Assess computability issues with legacy systems
 - ix. Assign a budget
 - x. None of the above
 - xi. I do not know
 - b. Design
 - i. Involve important stakeholders

- ii. Define roles and responsibilities
- iii. Conduct meetings/workshops
- iv. Formulate a communication plan
- v. Formulate an implementation plan
- vi. Ensure strategic alignment to daily work
- vii. Formulate a governance framework
- viii. Define a change management plan
 - ix. Conduct a pilot group
 - x. Define performance measures
- xi. None of the above
- xii. I do not know
- c. Implement
 - i. Communicate desired outcome
 - ii. Train users
 - iii. Introduce incentives
 - iv. Communicate the governance framework
 - v. Identify quick wins / success stories
 - vi. Show appreciation to ESS
 - vii. Measure success
 - viii. None of the above
 - ix. I do not know

11. Open feedback